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The Ohio Public Health Journal

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EDITORIALS

Important Health Legislation Before Assembly This Year

As the present legislative session has progressed, it has developed into one of the most important in years, from a public health standpoint. Bill after bill bearing upon some important phase of public health work has been introduced and in general the legislators seem favorably inclined toward progressive legislation in this field.

The review of legislation in this issue of the OHIO PUBLIC HEALTH JOURNAL covers developments up to March 26. It will be to a great extent out of date by the time the magazine reaches readers, as each day sees new bills introduced and pending bills pushed farther along the road toward final action. Readers who are interested in particular bills of public health importance, therefore, are invited to avail themselves of later information at the disposal of the State Department of Health. The Department is keeping in close touch with legislative developments and will gladly supply up-to-date information which may be requested.

* * *

Ohio's Local Health Funds Are Not Wisely Spent

Ohio's expenditure of one and one-half millions of dollars for local public health administration in 1918 was not directed in such a way as to produce the maximum of results in disease prevention. This is evident in statistics compiled by the State Department of Health upon the basis of reports from local health departments.

The following figures tell the story of unwise use of public health funds:

Total expenditures (reports received from 62.07 per cent of all local districts)		$983,712 20
Expenditures of cities (reports received from 68.75 per cent of all cities):		
Salaries	$580,497 25	
Contagious diseases (largely quarantine)	101,094 47	
All other purposes	178,149 78	
Total, 68.75 per cent of cities		871,473 58

Expenditures of villages (reports received from 61.26 per cent of all villages):		
Salaries	$23,426 32	
Contagious diseases (largely quarantine)	17,971 42	
All other purposes	6,881 71	
Total, 61.26 per cent of villages		48,345 28
Expenditures of townships (reports received from 61.36 per cent of all townships):		
Salaries	$26,202 25	
Contagious diseases (largely quarantine)	22,965 10	
All other purposes	13,207 68	
Total, 61.36 per cent of townships		63,893 37

If the averages registered in these partial reports prevailed for all cities, villages and townships in the State, the totals for all districts in each of the three classes were as follows: Cities $1,388,800, villages $78,750, townships $104,102.

Public health authorities agree that direct control of contagious diseases is not of sufficient relative importance in a public health program to warrant diversion to that purpose of as large a share of funds as in the villages and townships considered in the foregoing table. In a study covering sixty years of health work in Providence, Dr. Charles V. Chapin estimated that twenty-six percent of the reduction in death rate clearly attributable to public health activities could be attributed to direct control of contagious diseases. This percentage, moreover, does not indicate the relative attention which such control should receive, for the death rate is only a partial measure of the effectiveness of a health program — reduction of unnecessary sickness and consequent increase of the efficiency of citizens are also to be considered. From this broader standpoint, Dr. Chapin has rated quarantine as amounting in importance to about fifteen percent of the health work that the community should do.

Yet these Ohio villages and townships spent over one-third of their health funds solely for this purpose, in addition to the large share of the salary total which could rightly be placed under this head, inasmuch as most village and rural health officers confine their official activities to quarantine work.

It is a case of locking the stable door too late. Money is devoted to fighting disease outbreaks which would never have been permitted to occur had proper attention been paid, and sufficient funds been devoted, to real preventive work. Public health nursing, school inspection, child hygiene, typhoid prevention, laboratory work, public health education — how many Ohio communities are conducting health programs which give attention to these important phases of disease prevention?

It is safe to say that expenditure of funds for these purposes in 1918 would have produced more actual betterment of public health than

did the outlay summaized in the accompanying table. A corps of trained, efficient health officers, given even the small amount of money which the townships and villages saw fit to spend for public health, could have saved more lives and prevented more sickness than did the untrained incumbents of these offices.

Public health is purchasable, but you must know where to buy it if you are to get what you pay for.

Provision of trained health officers, supported by an adequate organization and having jurisdiction over districts large enough to make overhead costs reasonable, is the first step toward the solution of the problem presented by this financial study.

* * *

Country Residents Getting Too Little Protection

Another point to be noted in the summary of local health expenditures in 1918 is the striking difference between the amounts paid by cities and by village and township districts for health protection. Approximately one-half of Ohio's people live in the country. Yet only one-ninth of all the local health districts' expenditures were those of rural districts.

Observation of health conditions which exist shows the result of this neglect. The diseases which are most easily susceptible to public health control are highly prevalent in the rural districts, in comparison with the cities. Typhoid fever and smallpox, for example, reap a much greater harvest in the country than in the better protected cities. Country and village school children are only rarely given health supervision; the result of this lack, as indicated by the draft examinations, is a relatively high incidence of such defects as bad teeth, which might have been warded off by proper care in childhood.

The country resident, with his opportunities for a healthful life in the open air vastly greater than those of his city cousin, should be our healthiest citizen. He will not become such however, until he is relieved of the heavy burden of preventable disease which now weighs him down. Adequate health administrative machinery for the rural districts will give the needed protection.

* * *

Health Boards May Now Employ Nurses

Any local board of health in Ohio may now employ one or more public health nurses. House Bill 21, passed as an emergency measure, signed by Governor Cox and now in effect, grants this authority. Previously existing laws had made no provision for public health nurses, and such nursing service as has been given, except in charter cities and

in counties employing tuberculosis nurses, has been at the expense of private organizations.

Satisfactory service has been given by the nurses employed by public health leagues, women's club federations and like organizations, and the people of the State owe these public-spirited groups a great debt of gratitude. It is contrary to best governmental practice, however, to have public service rendered at private expense. Public health nursing service is not charity, but a sound investment of money in an enterprise which promotes public efficiency. It should therefore be paid for out of public funds. The new law makes it possible to do this.

If the Hughes health district bill is adopted, nursing service for all parts of the State will be provided by staffs under the direction of the district health commissioners. This system will not be in operation until next year, however, and during the intervening nine months much good work can be accomplished by nurses employed by present local health authorities.

The community which wishes to save baby lives during the coming summer can not wait for the Hughes bill to become operative. It must have an adequate nursing force immediately to accomplish this and many other health benefits for which a pressing need exists.

* * *

Aid Offered to Cities for Venereal Disease Control

Any city in Ohio can have a venereal disease clinic if it is willing to add a small sum of money to the amount which the State and federal governments are ready to spend for this purpose. Fifteen cities have taken advantage of this opportunity to do a valuable piece of public health work and negotiations are in progress to the same end in five other cities. These twenty operating and proposed clinics will serve a population of two and one-quarter millions — forty percent of the people of the State. It is the purpose of the State Department of Health to extend this system as rapidly as possible.

By the co-operative plan under which the clinics are being established, the State Department of Health furnishes free salvarsan for treatment of patients and pays the salary of the physician in charge. Funds for these purposes are included in Ohio's grant of slightly over $51,000 from tthe $1,000,000 appropriated by Congress under the Chamberlain-Kahn act for venereal disease control. The local community provides and maintains quarters and equipment for the clinic and pays for the services of a nurse.

Along with its primary feature of treating venereal disease patients who are unable to pay for necessary medical treatment, the clinic serves

as a center for educational activities in its community. Addresses in industrial plants form an important part of the educational work.

Thorough-going treatment of venereal disease sufferers and quarantine of all cases in which such action is necessary for protection of the public health is recognized as the most important method of producing an immediate reduction in venereal disease prevalence. This line of attack stops the infection at its source. At this stage of the fight, a community which does not possess a clinic is badly handicapped, however energetic it may be in carrying on other phases of the campaign.

Every city, large or small, which is without a clinic should take steps to remedy this situation at once.

* * *

Do You Need a Trained Public Health Worker? Any community which is in need of public health workers should communicate with the free health employment bureau conducted by the American Public Health Association, Boston. This bureau lists many trained sanitarians who are returning from war service and are looking for employment. All branches of public health work are represented among the names which are on file. Letters in regard to positions should state the type of position and the salary offered. The bureau makes no charge for its services.

* * *

Lloyd-George's Views on the Importance of Public Health Work "You cannot maintain an A1 empire with a C3 population." That statement of David Lloyd-George's applies as truly to the American Republic and to the State of Ohio as it does to the British Empire, to which the Premier applied it in the speech which is quoted in this magazine.

The war did not last long enough for America to make this country comb her available man-power and classify her population according to health in as detailed a manner as was found necessary in Great Britain. While, therefore, we had no grouping of men as "A1", "B2" and "C3", we did have an enormous number of rejections on first examination because of physical inability to fight. The later adoption of a "limited service" classification brought some of these men back from the discard, and as thorough-going a study as Great Britain made would probably have brought about the utilization of still more rejected men. There can be no doubt, however, that as great a proportion of Americans as of British would have remained in Class C3 even under the most thorough examination and re-examination.

Lack of adequate protection against disease and lack of constructive measures for the development of high standards of public health can justly be blamed for a large share of the C3 total.

To wipe out these deficiencies in the State of Ohio is the aim of proposed legislation for the strengthening of our public health organization.

Shall Ohio face the future as an A1 or as a C3 State?

* * *

Tell Us Your Opinion of the Journal

Do you read your OHIO PUBLIC HEALTH JOURNAL from cover to cover each month? If you do, we are delighted. If you don't, and if you represent any large element of the JOURNAL's subscription list, we feel that it must be our fault and we want to know the reason.

True, now and then we receive bouquets, as do most publishers. For example, these extracts from recent letters:

"The value of your JOURNAL to the individual, the family, the community, can not be counted by human mathematics. The January number, with its clear statements about influenza — what it has done — what it is doing — and your special message about the need for the care of children in country districts and what our health officials ought never be to be worth while — I want to go to some places where I am quite sure those who are at the head of our schools and public interests have not so much as heard that there is a health journal."

"The January number of HEALTH JOURNAL received — mighty good reading!"

"The OHIO PUBLIC HEALTH JOURNAL is most valuable. I am sure a great company of people thank you for its suggestions, information and valuable help to protect and preserve health."

From these letters we judge that the JOURNAL must be doing a certain amount of good. But the question in which we are most deeply interested is this:

"How well does it measure up to your individual ideas of what a publication bearing its name should be?"

We sincerely desire your honest opinion of the magazine, and we welcome adverse criticism as well as that of a more complimentary nature.

Bouquets are pleasant things to be found in one's mail, but the average editor is likely to learn more from well-directed brickbats.

Health District Bill Passed by House

Review of Public Health Legislation — Passed and Pending

As this issue of the "Ohio Public Health Journal" goes to press, the Hughes bill has been passed by the Senate also, with a few slight amendments which have been concurred in by the House.

HOUSE Bill No. 211, the Hughes health district bill, has passed the lower house and is before the Senate. Amendments inserted in the House committee and on the floor of the House were merely corrections in verbiage and changes to clarify certain sections; in all essential details the bill as passed by the House was the same as when introduced and as published in the February number of this magazine.

The vote in the House was 80 for the bill and 14 opposed. Votes of absentees recorded later added one to each side. The only argument against the bill offered in the House was that of expense to the rural counties. This was disposed of by Representative Hughes, by means of estimates showing that the tax burden imposed by the bill in such counties would be slight—fifty-five cents a year on five thousand dollars' worth of property, according to Mr. Hughes, in the average district. In the city districts, both sides agreed, the cost of the new system would be no greater, and might be less, than the present one.

The only law of a strictly public health nature enacted by the Assembly and signed by the Governor prior to March 26 was House Bill No. 21, introduced by Representative Hughes, authorizing the employment of public health nurses by municipal boards of health. This bill, amending Section 4411 of the General Code, is printed herewith:

AN ACT to amend section 4411 of the General Code, relating to employes of the local boards of health.

(108 OHIO LAWS)

Be it enacted by the General Assembly of the State of Ohio:

SECTION 1. That section 4411 of the General Code be amended to read as follows:

Sec. 4411. The board may also appoint as many persons for sanitary duty as in its opinion the public health and sanitary condition of the corporation require, and such persons shall have general police powers and be known as sanitary police. The board may also appoint as many persons for public health nurse duty as in its opinion the public health and sanitary conditions of the corporation require, and such persons shall be registered nurses and shall be known as public health nurses; provided, however, that where registered nurses are not available the board may appoint other suitable persons as public health nurses. The council may determine the maximum number of sanitary police and public health nurses so to be appointed.

SECTION 2. That said original section 4411 of the General Code be, and the same is hereby repealed.

SECTION 3. That this act be and is hereby declared to be an emergency measure; that the emergency therefor being the prevalence in the state of Ohio of the Spanish influenza in malignant form and other contagious and infectious diseases demanding immediate and vigorous attention in order that the health and safety of the citi-

zens of said state may be properly protected and preserved.

Passed February 13, 1919.

Approved by the Governor February 28, 1919.

Filed in office of Secretary of State, February 28, 1919.

By reason of the emergency clause (Section 3) this measure became effective immediately upon approval by the Governor.

Pending measures of interest to public health workers, with the status of each on March 26, are as follows:

Senate Bill No. 2 (Mr. Kryder), authorizing the installation of chemical closets in rural school buildings. Passed by Senate, indefinitely postponed by House, motion pending in House to reconsider postponement.

Senate Bill No. 14 (Mr. Sparks), providing for establishment of a state hotel department to inspect and regulate hotels and restaurants. Passed by Senate, with amendments creating division of hotels in office of State Fire Marshal, instead of a separate hotel department, and placing enforcement under jurisdiction of that division; reported favorably by House insurance committee.

Senate Bill No. 15 (Mr. Kryder), relative to classification and inspection of hospitals (see OHIO PUBLIC HEALTH JOURNAL, February, 1919, p. 60, for outline of bill). Passed unanimously by both houses, before Governor for approval.

Senate Bill No. 66 (Mr. Davis), authorizing the establishment of sanitary districts, similar in organization to present conservancy districts. The need for such a bill has been illustrated by the situation in the lower Mahoning valley,* where insanitary conditions can not be corrected under existing laws, which provide no means of united action by the various political subdivisions involved. Senator Davis represents Mahoning County. The bill has the backing of local officials and of industrial plants in the Warren-Youngstown district. It is before the public health committee of the Senate.

Senate Bill No. 74 (Mr. Miller), providing for compensation of victims of occupational diseases on the same basis as for victims of industrial injuries, and making appointments to the Industrial Commission of Ohio subject to approval by the Senate. Passed by both houses with amendments striking out the compensation features, vetoed by the Governor. As passed this bill had no public health features. (Identical with House Bill No. 266. See also discussion of House Bill No. 441.)

Senate Bill No. 77 (Mr. Jones of Franklin), granting osteopathic physicians an examination in surgery by the State Medical Board. Passage recommended (with amendments) by public health committee of Senate. (See also House Bill No. 287, identical with this bill.)

Senate Bill No. 98 (Mr. Archer). (See House Bill No. 240, identical with this bill.)

Senate Bill No. 99 (Mr. Whittemore), providing for flood prevention and conservation of the water resources of the State. Before public works committee of Senate. (See also House Bill No. 313, identical with this bill.)

Senate Bill No. 104 (Mr. Hopley), providing for registration of births and deaths of Ohioans occurring outside the State. Passage recommended by public health committee of Senate. (See also House Bill No. 314, identical with this bill.)

Senate Bill No. 121 (Mr. Berry, by request), to provide a seal for the State Department of Health for the authentication of records and to authorize the administering of oaths by representatives of the Department. Passed by Senate, in public health committee of House.

Senate Bill No. 124 (Mr. Norris), providing for an annual "Ohio welfare conference" (replacing the present state conference of charities and corrections), to be called by the Board of State Charities, and authorizing the payment of expenses of local officials attending the conference upon invitation of the Board of State Charities. Reported favorably by public health committee of Senate.

Senate Bill No. 127 (Mr. Ritter), to amend sections 1249 to 1261 of the General Code (the "Bense Act"), so as to remove the necessity for a popu-

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*See Ohio Public Health Journal, IX, 9-10 (Sept.-Oct., 1918), pp. 383, 400-407.

lar vote on bond issues to carry out orders of the State Department of Health for sanitary improvements. Reported with recommendation for passage by cities committee of Senate.

House Bill No. 27 (Mr. King), requiring the maintenance of washrooms for the use of employees at coal mines. Passed (with amendments) by both houses, before Governor.

House Bill No. 31 (Mr. Cable), requiring (as amended) maintenance of at least one public comfort station in each municipality having a water system. Passed by House, reported favorably by Senate committee on cities, recommitted to Senate committee on villages.

House Bill No. 42 (Mr. Carson), providing for a State hospital for industrially injured persons. In mines and mining committee of House since January 20.

House Bill No. 65 (Mr. Comings), authorizing contracts by county commissioners with one or more hospitals, instead of with one hospital as at present, for the care of the indigent sick, other than those suffering from pulmonary tuberculosis. Passed by House and, with amendments not yet concurred in by House, by Senate.

House Bill No. 142 (Mr. Lonz), requiring medical examination of food handlers. In House public health committee. (See outline of bill in February OHIO PUBLIC HEALTH JOURNAL, p. 60.)

House Bill No. 145 (Mr. Cable), changing the wording of the present nurses' registration law so as to give the State Medical Board clear authority to define a "nurses' training school in good standing." Passed by both houses, before Governor.

House Bill No. 158 (Mr. Comings), providing for medical and surgical treatment, at public expense, of crippled children. Passed (with amendments) by both houses, before Governor.

House Bill No. 173 (Mr. Lustig), naming a list of occupations in which girls under 21 shall not be employed. (Compare this with House Bills No. 175 and No. 362.) In House labor committee.

House Bill No. 174 (Mr. Smith), requiring the protection of motormen and conductors by the heating of electric-car vestibules in winter. Passed by House, before public utilities committee of Senate.

House Bill No. 175 (Mr. Greve), extending existing restrictions upon hours of labor of women by forbidding employment of women in any manufacturing establishment where one or more persons are employed before six o'clock in the morning or after ten o'clock at night on any day of the week. (Compare this with House Bills No. 173 and 362.) In labor committee of House since February 5.

House Bill No. 193 (Mr. Bliss, by request). (See Senate Bill No. 14, identical with this bill.)

House Bill No. 211 (Mr. Hughes). (See discussion at beginning of this article.)

House Bill No. 214 (Mr. Donahay), authorizing the administration of an anesthetic by a registered nurse under a physician's direction. Passed by both houses.

House Bill No. 227 (Mr. Gordon of Brown), requiring cars, waiting rooms and other equipment of railroads to be kept in a sanitary condition. Reported favorably by public health committee of House.

House Bill No. 233 (Mr. Wenner), changing the present law permitting (but not requiring) the employment of physicians and nurses by "each and every board of education" so as to permit the hiring of such employees by "each and every city, village, rural and county board of education." (Compare this with House Bill No. 381.) In House public health committee.

House Bill No. 240 (Mr. Matthews), establishing a state board of optometry to regulate the practice of optometry. Passed, with amendments, by both houses.

House Bill No. 243 (Mr. Kay), requiring the maintenance of free public drinking water accommodations and comfort stations at fair grounds and amusement parks. Passed by House, in public health committee of Senate.

House Bill No. 252 (Mr. Delehanty), forbidding the manufacture and sale of adulterated ice cream and establishing a standard of butterfat for ice cream. In dairy and food products committee of House.

House Bill No. 266 (Mr. Crabbe). (See Senate Bill No. 74, identical with this bill. See also House Bill No. 441.)

House Bill No. 280 (Mr. Evans), authorizing county commissioners to acquire, as well as (under present law) to construct, maintain and operate water

supply systems in county sewer districts. Passage, with amendments, recommended by House public health committee.

House Bill No. 281 (Mr. Evans), authorizing county commissioners to acquire, as well as (under present law) to construct, maintain and operate sewerage systems and sewage disposal works in county sewer districts. Passage, with amendments, recommended by House public health committee.

House Bill No. 282 (Mr. Dunspaugh), changing from fifty-four to fifty hours per week and from ten to nine hours per day the maximum time for which girls under twenty-one may be employed in occupations specified in section 12993, General Code, and requiring employers to keep on file employment certificates of all girl employees between sixteen and eighteen years of age. In labor committee of House.

House Bill No. 285 (Mr. Jones of Trumbull), defining the term "institution" as used in the chapter of the General Code regarding institutions for the care of children. Passed by House, passage recommended by public health committee in Senate.

House Bill No. 287 (Mr. Wenner), identical with Senate Bill No. 77 (q. v.). Passage recommended by public health committee of House.

House Bill No. 305 (Mr. Chester), amending present county hospital law so as to have trustees in charge of establishing such a hospital appointed by Governor, and providing a board of hospital trustees, to be chosen by county commissioners, to manage the institution, through a superintendent chosen by the trustees themselves, after its completion. Passage, as amended, recommended by House public health committee.

House Bill No. 313 (Mr. Harter), providing for flood prevention and conservation of the water resources of the State. Before House committee on conservation of natural resources. (See also Senate Bill No. 99, identical with this measure.)

House Bill No. 314 (Mr. Helfrich), providing for registration of births or deaths of Ohioans occurring outside the State. Passage recommended by House public health committee. (Identical with Senate Bill No. 104.)

House Bill No. 346 (Mr. Swedersky), forbidding the use of salamanders or other coke-burners giving off injurious gases in enclosures where persons are employed. Passage, as amended, recommended by labor committee of House.

House Bill No. 350 (Mr. Gorrell), extending the application of the present statutes against prostitution and sexual immorality so that, in a general way, every person — man or woman — who engages or aids another to engage in immoral relations is declared to be guilty of a violation of the law; differentiating between first and second degree violations (two or more offenses within a year constitute a first degree violation, punishable by imprisonment for one to three years, and one offense in a year is a second degree violation, with imprisonment not exceeding one year as the penalty); providing for examination, upon order of the court, of convicted persons for venereal disease, and forbidding parole of venereally diseased persons unless provision is made for their treatment. Before public health committee of House.

House Bill No. 353 (Mr. Helfrich), authorizing the establishment by nurses' training schools of one-year courses for training attendant nurses, graduates of such courses, if they have educational qualifications sufficient to admit them to a first grade high school and are at least twenty years old, being entitled to registration as attendant nurses and authorized to attend cases under the supervision of a physician or registered nurse or under such restrictions as may be imposed by the State Medical Board. In public health committee of House.

House Bill No. 361 (Mr. Dunspaugh), providing for State payment of old age pensions to persons over sixty-five years old, under certain enumerated conditions and in such amounts as not to make the beneficiary's total income exceed three hundred and fifty dollars a year, with five dollars a week as the maximum payment. In labor committee of House.

House Bill No. 362 (Mr. Dunspaugh), naming a list of occupations in which women shall not be employed. (Compare this with House Bills No. 173 and No. 175.) In labor committee of House.

House Bill No. 371 (Mr. Robins), making extensive changes in the rules of procedure in the adoption of children, and providing, among other things, that development of feeblemindedness, epilepsy, insanity or ven-

ereal disease in an adopted child before he becomes fourteen years of age, as a result of conditions existing prior to adoption and unknown to the adopting parent, shall be ground for annulling the adoption. Passage, with amendments, recommended by judiciary committee of House.

House Bill No. 374 (Mr. Cowan), providing for the sterilization of mental defectives, and creating a board of examiners, including three members appointed by the Governor, together with the "secretary of the State Board of Health"* and the secretary of the Board of State Charities, to carry out the provisions of the bill. In House public health committee.

House Bill No. 381 (Mr. Pearson), requiring physical education in all schools (public, parochial and private) in accordance with courses approved by the Superintendent of Public Instruction, requiring each county board of education to employ one or more physicians and one or more nurses for health supervision in the schools, providing for the expenditure of school funds up to thirty cents per enrolled pupil for the treatment (with the consent of parents) of physically defective children whose parents are financially unable to provide such treatment, providing for the establishment of physical education courses in normal schools of the State, creating the position of supervisor of health in the office of the State Superintendent of Public Instruction to administer the proposed system and withholding State financial aid now provided by law from school districts which fail to comply with this act. (Compare this with House Bill No. 233.) In common schools committee of House.

House Bill No. 383 (Mr. Crosser), authorizing (as amended by committee) a county holding membership in a tuberculosis hospital district to sell its interest, with the approval of the State Department of Health, to any other county in the district. Passage, with amendments, recommended by county affairs committee of House.

House Bill No. 398 (Mr. Federman), providing for the licensing of manufacturers of bottled soft drinks sold in Ohio, for the analysis of such drinks and for the sanitary inspection of establishments in which they are manufactured. In public health committee of House.

House Bill No. 403 (Mr. Harter), authorizing county commissioners of a county in a tuberculosis hospital district to establish and maintain (with the approval of the State Department of Health) an auxiliary county tuberculosis hospital and dispensary and to employ public health nurses, if the facilities afforded by the district hospital board of trustees are insufficient to care for tuberculous persons in the county. In public health committee of House.

House Bill No. 404 (Mr. Gardner), authorizing the establishment of a county tuberculosis hospital in a county in which a municipal tuberculosis hospital exists, and the sale of a municipal tuberculosis hospital to the county in which it is situated. In House committee on public health.

House Bill No. 412 (Mr. Helfrich), providing for the registration by the State Medical Board of persons who are not registered nurses and who are adjudged by the board to be qualified to serve as attendants for the sick. (Compare this with House Bill No. 353.) In public health committee of House.

House Bill No. 416 (Mr. Carpenter), increasing the maximum compensation from the State insurance fund for deaths from industrial injuries to six thousand dollars. In labor committee of House.

House Bill No. 424 (Mr. Dunspaugh), extending the scope of the workmen's compensation law so as to make it apply to all employers of one or more persons. In labor committee of House.

House Bill No. 426 (Mr. Luchsinger), authorizing the manufacture and sale of compounds of evaporated skimmed milk and vegetable oil. In dairy and food products committee of House.

House Bill No. 427 (Mr. Kay), amending the law to regulate the manufacture and sale of mattresses, etc., and making it the duty of the Industrial

* The office of "secretary of the State Board of Health" has been nonexistent since the abolition of the State Board of Health and creation of the reorganized State Department of Health in 1917.

Commission to see that the law is enforced. In public health committee of the House.

House Bill No. 441 (Mr. Wenner), extending the scope of the workmen's compensation law to include illness and death due to certain specified occupational diseases. (Compare this with Senate Bill No. 74; House Bill No. 441 was introduced after the compensation features had been stricken out of Senate Bill No. 74.) In labor committee of House.

House Bill No. 447 (Mr. Robinson), establishing regulations to govern the manufacture and sale of milk powder and of "reconstructed milk" made from such powder, and charging the Secretary of Agriculture with the enforcement of the act. In agriculture committee of House.

House Bill No. 450 (Mr. Hughes), establishing a fine of from ten to fifty dollars as a penalty for failure of a physician to report an occupational disease in accordance with existing law. In public health committee of House.

House Bill No. 465 (Mr. Matthews), providing for a survey of the water resources of Ohio by the Department of Public Works. In public waterways committee of House.

Proposed legislation which had definitely been killed by March 26 included Senate Bill No. 9 and House Bill No. 59, identical measures to exempt Christian Science practitioners from regulations governing practitioners of medicine, and Senate Bill No. 18 and House Bill No. 80, identical bills to establish a state non-medical board to regulate chiropractors and other non-medical practitioners.

1918 Disease Reports

The following table gives the totals of reported cases of a number of the leading notifiable diseases in Ohio in 1918, with the previous four years' figures for comparison:

Disease.	Five-year annual averages.	Total 1914-18.	1918.	1917.	1916.	1915.	1914.
Diphtheria	8,046.2	40,231	5,502	8,052	8,094	8,962	9,621
Measles	26,862.	134,310	14,065	28,268	56,438	19,348	16,191
Meningitis, Epidemic Cerebrospinal	307.4	1,537	342	641	172	181	201
Poliomyelitis, Acute infectious	323.8	1,619	152	360	551	474	82
Pneumonia, Acute lobar	*4,055.4	20,277	7,410	4,130	4,020	4,717	.....
Scarlet Fever	8,838.	44,190	7,299	10,032	10,160	9,173	7,526
Smallpox	5,136.2	25,681	10,229	5,258	2,184	3,221	4,789
Trachoma	366.8	1,834	305	386	255	351	537
Tuberculosis (all forms)	6,382.	31,910	6,403	6,991	6,217	6,624	5,685
Typhoid fever	4,015.4	20,077	2,918	3,263	4,599	4,501	4,796
Whooping cough	8,741.	43,705	10,764	8,847	9,256	8,536	6,302

*Reportable only since 1915.

National Health for National Efficiency*

By David Lloyd-George.

As soon as the unseen hand casts the rainbow of peace on the skies we must be ready. And to be ready is summarized in one counsel. We must profit by the lessons of the war.

The first lesson it has taught us is the immense importance of maintaining the solidarity of the British empire. The British empire has rendered a service to humanity the magnitude of which will appear greater and greater as this generation recedes into the past. It helped to stop the onrush of barbarism that was sweeping over Europe. It has held the unfenced highways of the world free for the armies of freedom to pass and repass. To permit such an organization to fall to pieces after the war would be a crime against civilization.

The next great lesson of the war is that if the state, if Britain, is to be thoroughly equipped to face any emergency of either peace or war the state must take a more constant and more intelligent interest in the health and fitness of the people. If the empire is to be equal to this task, the men and women who make up the empire must be equal to theirs. How does Britain stand in the light of that test? We have done great things in this war. We could have accomplished greater if this country had been in a sound condition. War, like sickness, lays bare the weakness of the constitution. What has been ours? Let us talk quite frankly.

We have had a ministry of national service set up in this country, and since then we have had the most carefully compiled statistics as to the health of the people, certainly between the ages of 18 and 42. That is the age of fitness and the age of strength. What has it revealed?

You have the three grades—your A1, your B2 and your C3—and all I can tell you is this, that the results of these examinations are sufficiently startling—I do not mind using the word appalling. I hardly dare to tell you what it is in some parts of Lancashire. The number of B2 and C3 men throughout the kingdom is prodigious, so much so that we have half suspected the doctors. But there was a re-examamination, which did not make very much difference, and I apologize to the doctors here—for the first time.

What does it mean? When you look at it, it means this—that we have used our human material in this country prodigally, foolishly, cruelly. I asked the minister of national service how many men we could have put into the fighting ranks if the health of the country had been properly looked after, and I was staggered at the reply. It was a considered reply. He said at least one million. If we had only had that number this war would before this have ended triumphantly for us.

But here we are, combing out essential industries—but there are

* Excerpt from an address delivered by Premier Lloyd-George at Manchester.

questions as to whether you should put miners back or keep them in the army (a few tens of thousands); whether you should put a few thousands more into munition works. And yet you had one million men who, if the state had taken proper care of the fitness of the people, would have been available for the war. And the vigor and strength of the workers of this country have been unsatisfactory even in pursuits where all conditions are favorable to the development of a fine physique—agriculture. The results in agriculture have been almost as disappointing as in almost any other industry—a thoroughly healthy occupation of that kind.

Everywhere a virile race has been wasted by neglect and want of thought of it. It is a danger to the state and to the empire.

I solemnly warn you, my fellow countrymen, you cannot maintain an A1 empire with a C3 population.

And unless this lesson is learned the war will have been in vain. Our schooling has cost us dear, but if we make the best use of it I believe it will be worth it all in the end, even in the saving of human life.

Care for the health of the people is the secret of national efficiency. It is the secret of national recuperation. With our machinery we take the greatest care. It is material. The way we look after it if the steel is defective through badly ventilated or ill-constructed furnaces or insufficient fuel! If the machine is inadequately oiled or looked after or overworked, if repairs are not done in time and done thoroughly—well, your machinery is of no use.

And man is the most delicately constructed of all machines. It is bad business not to look after the men, and women, and—if I may say so—above all the children.

Now the most important workshop in this land is the home. And the quality of the steel in the national fabric depends upon the home. If it is unhealthy, ill-supplied, ill-managed, the quality becomes defective and it cannot bear the strain.

What are the influences that make for the health of the people? The first is the houses in which the people live. You cannot bring up a healthy people in unhealthy homes. Why, even those who rear animals will tell you that. The problem of housing in this country is the most urgent that awaits treatment. We have talked about it, we have played with it for forty, fifty years, but it has never been really taken in hand. It has only been taken in hand in the way an untidy or slovenly housewife takes up the cleaning of her house—just that part where the visitor can see.

There has been too much of that in our cities. The slums, the bad houses — they are out of sight. That is not the way to deal with a problem which affects the strength of the nation. No government, no party has had the courage to grapple with it in the way a good business man would grapple with some sort of rottenness which he discovered in his business, and which was wasting his assets. He would not trifle with it; he would have the thing thoroughly searched out and put right. That is what ought to be done. It is equally true of the whole field of public life. We have had acts of parliament running into hundreds of sections; we have had regulations that would fill a library; we have had the most

attractive pictures of model dwellings circulated, and we have had endless authorities. But you cannot plow the waste land with writing paper, you cannot sweep away slums with paint brushes, and you cannot bind the gaping wounds of the people with red tape. That is our first problem.

The next is this: There ought to be a more intelligent organization of the forces which have specially in charge the health of the nation—national, municipal, medical. We have enormous losses to make up. The crippled and the wounded must come first; but we must also think of the children who are to fill up the gap in the generation that is to come.

The state must see that they are built up into a strong, healthy and vigorous people. There is no surer way of strengthening the country than that.

What more are we to do to improve the life of the people? Wages during the war have been raised and we must see in the future that labor is requited with wages that will sustain life in full vigor. I am glad to see that in agriculture wages have gone up. There must be healthier conditions in the workshops. Many of them were admirable; many of them tolerable; many not tolerable. Bad health for the nation is bad business for all.

There are times in the history of the world when nations take a great leap forward into the light. This is such a time. There is a great river in eastern Europe which, after meandering sluggishly through hundreds of leagues, finding a great barrier in its road, concentrates the whole of its strength to break through—rushes along and then merges into a sunnier land and into more fertile plains. That is the story of the national life of this country before, during and after the war. It has taken a great rush forward, and when it emerges from the rocks through which its torrents are now struggling it will deploy into a sunnier and a fairer land.

The men who endure the discomfort, the terror, the torture in this mighty struggle have not gone through it all to re-establish more firmly in this land, for which they have fought, the dominion of slums; of wages that will not maintain, let alone cheer life; of confusion and disorganization, which create waste, inefficiency, misery and squalor.

But to enable the nation to bear the gigantic burden of debt which the war will impose upon it, and the still greater burden of recuperation and reconstruction, we must see that the national resources are developed to the full, and that the state renders all assistance in its power of the attainment of that object. Comfort is the surest preventive of anarchy, but comfort involves plenty. How can you insure plenty? By insuring the best conditions of production. If abundance is not there you cannot distribute it. That is an obvious truth which the Bolsheviks seem to have overlooked. The Bolsheviks began with distribution and ended with distribution. Production did not concern them. That is the surest road to national poverty, and it is the Bolshevist method.

In my Welsh home we have an invariable method of ascertaining when the storm is coming. There is a lighthouse behind the western hills. When the weather is fair and settled you never see its light. But now and again it illumines the

darkness, and you then know that the storm is coming. I have been scanning the horizon, and I can see flashes on the sky which indicate to me that there are grave atmospheric disturbances in the social and economic world. In the natural world you cannot with thinking avert the storm. In the more artificial world of human society you can, if you take heed in time, avert the hurricane. I give one advice to my countrymen, and I say it solemnly to them—take heed in time. And if you do we shall enjoy settled weather for the harvest which is coming when the fierce heat of summer which is beating upon us in this great war will be over and past.

STATISTICS ON WORK OF VENEREAL CLINICS

Venereal disease clinics in Ohio in January treated 646 patients — an increase over the December total of 598. The patients included 364 men and 282 women. The number of visits totaled 2,922.

Gonorrhea cases numbered 267, syphilis 660 and chancroid 36. Twenty-three cases of gonorrhea, two of syphilis and six of chancroid were discharged as cured. Twenty-six cases were placed under quarantine and twelve were discharged from quarantine.

Two hundred and seventy-nine lectures were given by representatives of the Bureau of Venereal Diseases to audiences totaling more than twenty-four thousand persons. The film "Fit to Fight" was shown fifty-nine times and 1,210 placards were posted in cities maintaining clinics.

LEGAL AUTHORITY FOR EXAMINING PROSTITUTES

A community has a clear right to require medical examination of all persons convicted of violation of laws against prostitution and allied offenses and to require treatment of such persons when found diseased, according to a memorandum issued by the attorney general of the United States in regard to the legal aspects of such examination and treatment.

Legal authorities are quoted as establishing the right of the state, under its police power, to confine and subject to treatment persons afflicted with diseases dangerous to the public health, and to establish isolation hospitals in which any person afflicted with a dangerous communicable disease may be confined, even though he would be likely to receive proper treatment if left in the care of his friends.

"The right and, in fact, the duty of those in charge of a prison, or other place of detention, to ascertain the state of health of the inmates and to administer the necessary medical treatment, is surely beyond question," says the memorandum.

"The Department of Justice entertains no doubt upon the right to subject a person convicted of prostitution to a medical examination in order to ascertain whether or not she is afflicted with a communicable disease.

"It should be noted that in this proposed procedure the report of the medical examination after conviction is to be placed before the court simply for the latter's information; leaving to the court full discretion as to the effect of the report upon its determination of the sentence to be imposed."

Influenza Wipes Out Children's Year Savings

DEATHS of Ohio children under five years of age were nearly two thousand more numerous in 1918 than in either of the two years immediately preceding. The totals for the three years are as follows: 1918, 17,325; 1917, 15,373; 1916, 15,349.

The State, therefore, failed to approach the goal set for the Children's Year campaign — the reduction of deaths of children under five to a point 4,510 below the 1916 figure.

The influenza epidemic was the cause of the complete failure. Before the epidemic began, the monthly death figures showed improvement over the previous years, although the "saving" did not reach the mark which had been set. Influenza, however, in October, November and December, wiped out out all the "saving" which had been achieved and raised the totals for those months far above normal.

Influenza deaths of children under five numberd 2,231 — approximately 250 more, it will be noted, than the excess of 1918 mortality over that for 1916 and 1917. The influenza deaths were grouped by months as follows: October 806, November 886, December 539. In addition 902 children died of pneumonia not complicated with influenza.

In spite of the epidemic twenty-one of the smaller counties made slight savings as compared with 1916 death totals, and one of the large counties, Lucas, achieved a reduction of eighty-two in its death total of children under five.

The accompanying table gives each county's deaths by months for the year, with 1916 and 1917 totals added for comparison.

T. B. PREVALENCE AMONG DRAFTEES

Of the 15,621 men examined by twelve county draft boards of Ohio, 259 were tuberculous. This total includes both the men rejected by examining physicians and those rejected or discharged because of tuberculosis after arrival at camps.

If this figure is indicative of the prevalence of tuberculosis among Ohio men between 21 and 31 years of age, 1.67 percent of this section of the population have the disease. This agrees approximately with findings made in investigations at Framingham, Massachuetts.

INFECTION ACQUIRED BEFORE ENLISTMENT

Reports of venereal disease admissions among all troops in the United States for the seven months from July, 1918, to January, 1919, inclusive, showed a continuance of a high percentage of before-enlistment infections. In July 87 percent of all cases reported were contracted before entrance into the service, in August 91.3 percent, September 91 percent, October 90 percent, November 85 percent, December 82.8 percent, January 78 percent. It must be remembered that enlistments ceased shortly after November 1, which fact would naturally gradually decrease the percentage of uncured before-enlistment cases after that date.

DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE, OHIO, MONTHLY TOTALS FOR 1918, ANNUAL TOTALS FOR 1917 AND 1916.

County	Deaths 1916	Deaths 1917	Deaths, 1918												Total 12 Mos.
			Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Adams	65	54	2	7	7	6	5	1	2	9	4	2	9	5	59
Allen	170	155	20	10	31	18	14	11	12	19	19	18	15	23	210
Ashland	42	28	2	4	5	2	1	1	1	2	2	5	2	7	34
Ashtabula	163	143	10	11	8	14	13	9	7	16	19	10	14	17	148
Athens	148	136	17	12	11	13	4	2	17	18	28	17	42	20	201
Auglaize	59	50	1	3	7	3	1	2	6	6	6	2	2	7	46
Belmont	413	373	27	22	34	24	18	12	24	46	48	44	77	39	415
Brown	42	37	4	4	3	1	.....	3	2	2	5	6	4	5	39
Butler	258	265	25	27	23	13	20	8	25	28	20	65	33	25	312
Carroll	28	18	5	..	3	4	1	4	1	2	7	2	4	2	35
Champaign	52	45	3	7	7	1	3	4	5	4	9	12	3	7	65
Clark	177	180	9	19	21	20	13	15	15	21	28	35	14	29	239
Clermont	66	41	5	6	4	6	3	6	4	6	2	6	9	9	66
Clinton	38	41	3	5	3	4	4	3	3	4	4	18	2	2	55
Columbiana	252	255	17	15	22	28	21	26	19	33	16	30	36	28	291
Coshocton	70	40	6	3	3	2	6	3	3	4	7	8	13	6	64
Crawford	57	89	4	4	7	2	2	2	5	5	6	5	10	6	58
Cuyahoga	2,972	3,292	265	216	203	223	203	158	252	305	249	399	405	326	3,204
Darke	87	77	7	7	4	11	6	3	5	7	8	10	12	15	95
Defiance	42	43	3	3	7	5	2	3	4	.....	7	5	3	8	50
Delaware	58	40	4	3	3	2	3	1	5	6	3	4	3	5	42
Erie	53	70	5	8	3	2	4	4	1	7	8	11	18	7	78
Fairfield	68	80	11	8	9	5	10	9	1	6	9	22	9	4	103
Fayette	48	68	9	4	9	3	2	6	2	8	1	8	3	6	61
Franklin	609	619	57	51	71	68	54	36	47	69	59	87	62	70	731
Fulton	47	46	2	4	1	3	1	3	1	5	4	5	3	5	37
Gallia	57	41	2	1	6	2	5	5	3	13	7	9	7	7	67
Geauga	23	21	2	3	4	1	1	1	5	2	.....	2	2	1	24
Greene	68	66	5	3	11	10	6	.....	6	16	8	11	5	15	96
Guernsey	123	115	9	11	11	8	8	4	6	16	23	27	31	19	173

DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE, OHIO, MONTHLY TOTALS FOR 1918, ANNUAL TOTALS FOR 1917 AND 1916 — Concluded.

County	Deaths 1916	Deaths 1917	Deaths, 1918												Total 12 Mos.
			Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Hamilton	1,218	1,096	107	117	136	113	108	88	84	118	92	176	130	159	1,428
Hancock	78	59	5	5	4	11	2	3	5	4	6	9	4	6	64
Hardin	90	62	3	3	11	5	5	2	11	1	13	15	5	6	80
Harrison	30	29	1	3	4	1	3	4	6	5	3	4	9	4	47
Henry	34	38	2	5	6	2	4	5	3	3	3	6	3	4	46
Highland	53	52	3	8	4	6	2	2	2	3	6	5	6	4	51
Hocking	67	56	3	3	9	13	3	4	7	4	9	18	23	5	101
Holmes	35	44	4	5	1	3	4	4	.....	3	1	3	3	3	34
Huron	56	62	3	2	4	3	2	5	.....	6	12	18	9	6	70
Jackson	87	115	7	11	6	9	10	2	6	5	10	18	19	10	113
Jefferson	371	305	35	27	39	34	25	29	29	32	37	59	69	42	457
Knox	59	38	12	2	5	3	3	3	2	3	5	17	1	3	59
Lake	58	47	5	3	3	2	4	2	6	8	5	11	4	4	57
Lawrence	157	173	6	15	19	15	8	8	12	22	18	31	45	19	218
Licking	121	111	8	7	11	11	5	5	6	8	6	31	7	12	117
Logan	48	43	6	4	2	4	2	2	2	1	10	2	3	7	45
Lorain	305	250	18	22	20	18	23	17	11	29	20	33	43	36	290
Lucas	895	789	59	58	62	50	60	41	32	75	82	124	93	77	813
Madison	52	40	3	2	6	2	2	1	1	6	4	9	9	10	55
Mahoning	867	945	66	65	92	81	75	47	100	97	77	112	178	88	1,078
Marion	101	100	5	10	13	9	11	6	3	9	16	12	6	22	122
Medina	50	34	7	2	4	2	4	3	6	2	5	3	7	3	48
Meigs	46	54	3	8	8	4	1	4	6	10	11	12	13	9	89
Mercer	56	66	5	7	7	5	4	5	4	5	9	2	6	6	65
Miami	76	105	11	10	8	2	10	3	4	10	7	14	3	9	91
Monroe	37	43	2	1	4	5	4	2	2	3	3	2	7	2	37
Montgomery	486	484	39	39	40	34	28	23	20	45	41	98	59	53	519
Morgan	20	24	1	3	1	..	2	.....	1	2	3	4	8	6	31
Morrow	29	20	1	2	1	2	4	.....	1	1	4	4	.....	2	22
Muskingum	137	118	8	10	16	10	15	3	5	8	10	37	22	22	166

Noble	72	50	5	4	2	4	5	1	1	4	2	6	14	6	54
Ottawa	47	49	5	5	4	12	3	2	.....	4	4	7	.....	4	50
Paulding	42	30	2	5	5	3	.....	1	5	5	4	11	7	4	52
Perry	85	91	4	4	11	7	12	3	9	11	11	9	26	20	127
Pickaway	72	63	4	4	11	7	7	5	9	8	4	24	10	7	100
Pike	43	41	2	6	3	4	2	3	3	.....	2	11	7	3	46
Portage	76	67	4	5	9	4	8	4	5	3	10	6	9	9	76
Preble	27	45	3	3	3	2	2	.....	2	3	.....	4	2	7	31
Putnam	60	64	8	8	5	6	5	3	5	4	8	10	2	14	78
Richland	103	103	9	7	7	10	5	5	11	9	12	28	11	8	122
Ross	105	102	9	8	10	7	11	7	11	12	7	19	12	16	129
Sandusky	74	50	3	7	7	7	12	.....	4	5	6	9	6	10	76
Scioto	251	285	19	38	29	26	8	22	25	26	39	53	39	43	367
Seneca	74	96	7	6	6	8	10	7	4	3	9	13	8	13	94
Shelby	66	51	4	8	5	3	6	7	3	1	9	9	6	2	63
Stark	422	451	47	25	27	32	23	16	25	50	41	46	56	40	428
Summit	787	962	61	63	73	72	57	44	61	92	100	94	93	94	904
Trumbull	226	217	12	11	19	20	23	17	14	37	39	35	60	24	311
Tuscarawas	141	130	16	8	10	9	12	6	6	13	14	25	13	11	143
Union	43	33	4	2	2	4	3	1	1	4	6	1	1	5	34
Van Wert	45	36	3	2	4	5	5	3	2	7	1	4	.....	12	48
Vinton	31	38	1	3	4	5	2	1	4	6	5	7	5	7	50
Warren	53	49	3	4	3	5	5	1	6	5	8	13	9	5	67
Washington	98	76	5	5	13	22	6	5	3	8	11	9	8	7	102
Wayne	72	78	4	7	4	7	11	6	3	6	9	11	13	7	88
Williams	40	32	4	1	3	6	3	1	3	3	5	5	1	3	38
Wood	104	125	10	12	11	5	7	7	5	4	16	16	3	10	106
Wyandot	29	29	4	4	4	1	.....	1	5	1	4	4	.....	2	30
Total, State	15,349	15,373	1,241	1,205	1,381	1,266	1,120	847	1,101	1,547	1,530	2,263	2,067	1,757	17,325*

* Since some death certificates are always returned late, this total will be slightly changed.

Mental Hygiene Program of the United States Public Health Service

(From *Public Health Reports.*)

WITH the increasing recognition by health authorities of the significance of mental disease as a health problem, there is a growing demand for assistance in the formulation of a program of practicable control and preventive measures which can be inaugurated by health administration. The reader may, therefore, be interested in studying the following program of activities which the United States Public Health Service plans to carry on as rapidly as funds become available for such purpose. Such a program should take into consideration —

A. The most effective means by which the several Government agencies can cooperate in studies and investigations of mental hygiene.

B. The problems of better care and treatment of the insane, mental defective, and epileptic.

C. Measures for the prevention of mental disorders.

So far as these considerations are concerned the studies and investigations already made by the Public Health Service indicate the following activities as desirable and practicable:

A. COOPERATION WITH OTHER GOVERNMENT AGENCIES.

1. In addition to the duties prescribed by law as related to the mental examination of arriving aliens, cooperation with the Department of Labor (*a*) to establish a school for the training of medical officers as mental hygienists, (*b*) to provide facilities for training nurses and assistants for duty in mental hygiene work, and (*c*) to investigate the care and treatment of insane aliens confined under immigration laws in public and private institutions at Government expense.

2. Cooperation with other bureaus of the Treasury Department in the mental examination of coastwise pilots, locomotive engineers, and train dispatchers as a safeguard to the traveling public.

3. Cooperation with other departments or bureaus of the Government to devise practical methods for the mental examination of civil employees of the Government with a view to determine their fitness for different occupations.

4. Cooperation with the Department of the Interior in the study and prevention of insanity and mental deficiency among the wards of the Government, such as the Indians, Esquimaux, and other primitive races for which the Government is responsible.

5. Cooperation with the Bureau of Education in the revision of educational methods from the standpoint of mental hygiene.

6. Cooperation with the Bureau of Education in devising practical plans for the establishment of special classes for the training of feeble-minded and delinquent children.

7. Cooperation with State departments of justice and other agencies to secure (*a*) the adoption of a model law providing for the early treatment of mental dis-

orders, (*b*) the enactment of a model commitment law, and (*c*) the establishment of psychiatric pavilions in general hospitals.

8. Cooperation with Federal and State departments of justice to secure the establishment of psychiatric clinics in connection with the courts to determine the mental status of criminals, dependents, and delinquents appearing before the court.

B. PREVENTION.

1. Cooperation with State and local agencies to secure the adoption of a law making certain types of mental disorders reportable to the health authorities.

2. Reviewing and publishing State laws of commitment of the insane and feeble-minded.

3. Cooperation with the State and other agencies to determine the prevalence of the insane, feeble-minded, alcoholics, and epileptics.

4. Investigating the prevalence and the care and treatment of the insane, epileptics, feeble-minded, criminal, and dependent classes confined in institutions in Alaska and in the insular possessions.

5. Compiling a national reference index of the literature on mental hygiene.

6. Investigating mental status in relation to certain constitutional diseases and drug addiction.

7. Cooperation with the industrial hygiene unit of the United States Public Health Service in the studies and investigations of the mental status of workmen as related to output, fitness for the job, protection from health and injury hazards, and permanence of employment.

8. Cooperation with the child hygiene unit of the service in the study and investigation of insanity in children and of the personality of the potentially insane.

9. Cooperation with the Division of Venereal Diseases in studies and investigations of the mental status of prostitutes and of the relation of venereal diseases to mental disorders.

MENTAL HYGIENE A PUBLIC HEALTH ACTIVITY

As is often the case with other chronic illnesses, e. g., tuberculosis, malaria, Bright's disease, it is difficult to rouse the people to an appreciation of the need of taking steps to combat and control mental disease. To a large extent, to be sure, this is due to the persistence of the belief that mental disorders are a kind of mysterious dispensation, and that little or nothing can be done either to effect a cure of those affected, or to prevent the development of these dread disorders.

Continuing the comparison with other chronic diseases, it may be pointed out that only in recent years has the fact become established that a very large proportion of the mentally ill have hitherto escaped recognition. Early signs and symptoms of mental disorder have been overlooked, and the diagnosis of "insanity" has often been established only when it was too late to effect a cure. To be sure we have by no means reached the stage where all forms of mental disease are curable. Nevertheless,

sufficient is known to assure a considerable reduction in the prevalence of mental disorders provided certain practicable measures are taken.

At the present time, institutional care is generally provided only for the more pronounced types of mental disorders. According to the United States Census Bureau there were, in 1910, 187,791 persons in hospitals for the insane and 20,731 persons in institutions for the feeble-minded. While this gives some idea of the number of mental cases cared for in institutions specially provided for them, it must be remembered that it does not represent the total number of cases in this country, as many such individuals who are in need of institutional care never receive it. It has been calculated that the aggregate cost to the country of the insane alone is more than $160,000,000 annually. Added to this, and really more serious, are the personal suffering, unhappiness, social and family disasters, and business troubles brought about by mental disease.

On the basis of the lowest estimates there are two insane and four feeble-minded individuals for every 1,000 persons in the general population of the United States. Field investigations by officers of the United States Public Health Service indicate that in school children the ratio of feeble-minded will average eight per thousand.

The medical examinations of registrants in the first selective draft showed that out of each 1,000 men examined, 24 were denied military duty because of nervous or mental disorders. Other cases were unrecognized or developed under stress of military training and warfare, necessitating their return home.

Many of those who comprise the dependent and criminal population suffer from some type of mental disorder, either acquired or hereditary, and this disorder often constitutes the underlying cause of their dependency or imprisonment. Of the 84,198 persons confined in almshouses in 1910, at least 42,000 had some form of mental alienation; of the 136,472 persons in prisons, jails, workhouses, and institutions for juvenile delinquents at least 30,000 were mentally diseased. This gives some idea of the relation of mental disease to dependency and crime.

It is high time for physicians and health officers to take an active interest in mental disease as a public health problem. Early recognition of the signs and symptoms of mental disorder, attention to the various causative factors (social, family, occupational, hereditary, infectious), provision for the proper care of the mentally ill—these represent a practical program which is certain to achieve satisfactory results.—*Public Health Reports*, United States Public Health Service.

EXPOSING "FAKES"

"The Truth About Spoofs" is the heading of a poster recently issued by the National Safety Council for use on factory bulletin boards. It points out the dangers of "fake" patent medicines and tells how by observing principles of personal hygiene health can be maintained more cheaply than by throwing money away on such "cures." The National Safety Bulletins are said to be read by six million workers.

Health of Ohio Coal Miners

Abstract of a Report by Emery R. Hayhurst, Ph. D., M. D., Consultant in Industrial Hygiene, Ohio State Department of Health

(Continued from last month)

Health Hazards by Chief Occupations —

Investigations showed the HEALTH HAZARDS for various occupational designations to be as follows:

CAGERS. — Cagers and those who work around the bottom or the exit of the mine, breathe the air after it has made the complete circuit of the mine, provided the return air is by way of the hoisting shaft or the exit roadway, which is usually the case. The air movement is also brisk. Fine dust is a feature. Humidity is high. Getting wet with water drippings is almost unavoidable.

DRIVERS. — Drivers including motormen, trip-riders, and mule or pony men, are usually youths. The work is muddy, often also dusty, in strong drafts, and quite hazardous in regard to accidents.

LABORERS. — These are scattered about over the mine and have the hazards of the places in which they happen to work.

LOADERS. — These men are subjected to air conditions of the distant interior (work rooms), and to immense amounts of dust. Their work is laborious, on the tonnage basis, and when slack periods exist they are apt to sit around in cool, damp places.

MACHINE MEN. — These men have the ventilation hazards of the work rooms and are the most subject of all workers to breathing fine dust (bug dust). Most of the work is laborious and in strained attitudes.

PICK MINERS. — The work of the miner is much less difficult than before the days of the extensive use of powder. They have the ventilation hazards of the work room. The dust hazard is great. Their work is laborious, on the tonnage basis and rather monotonous, with considerable jar, much spurt work interspaced with spells of waiting for mine cars, when they are apt to sit around in cool atmospheres and damp places.

TIMBERMEN. — Ventilation hazards of work rooms and entries, more or less dust, also more or less wet work in many mines.

TRAPPERS. — Much of their time is spent in waiting at the doors, which they watch, or the switches. They may be in strong drafts carrying various amounts of dust. They are usually youths, sometimes old men.

TIPPLE MEN. — These workers at the surface of the coal mine have the hazards of weather exposure, but more especially, the breathing of a great deal of coal dust; occasionally, also, smoke and fumes from the burning dump piles where these exist. The weighmen are usually in enclosed quarters.

TRACK MEN. — Weather exposure and the breathing of a great deal of coal dust.

HOISTING ENGINEERS. — Exposure to excessive temperatures (100° to 140° F.) where steam hoists are used; a dangerous feature also, since these men must be constantly on the alert, as with their levers they guide the raising and lowering of cages by means of signals from bells or whistles.

CHILD LABOR. — Practically no feature in Ohio mines. Youths under 16 are prohibited by law from entering a mine. One hazard is that youths begin work in mines without preliminary physical examination to determine whether they are fit for such work.

STRIPPING MINES. — The chief health hazards are weather exposure, particularly heat in the summer time while working in low places. Also men in steam shovels are considerably exposed to heat from furnaces. Some risks from blasting powder fumes and dynamite.

COAL WASHERS. — Weather exposure with wet work and a great deal of dust from the crushing processes. Noise is a marked feature.

Some Special Hazards

ILLUMINATION. — Illumination is no longer a hazard for miners since much of the bottom is supplied with electric

lights and miners use the modern carbide lamps. Oil lamps are all but gone. Safety lamps, fortunately, with their imperfect illumination, are not required in Ohio mines.

Heat. — Ohio miners are not exposed to high working temperatures. Steam hoisting engineers may have undue exposures.

Cold. — The temperature of Ohio mines is invigorating. As long as workers keep active, the low temperatures, of themselves, are no hazard.

Humidity. — Dripping roofs, mud and dampness characterize most Ohio mines.

Fatigue. — Faulty postures and work of jarring, vibrative character, heavy lifting and straining at times, and a certain percentage of men ill-fitted physically for the work, are the chief hazards.

Hours of Work. — The eight-hour day, with very little overtime obtains at mines. Some company men (laborers) work ten hours.

Infections. — The disposal of stools in the gob, as is the prevailing method, can be made safe. The extent to which coal mine dust may transport virulent germs, as from spitting, has not been investigated; the hazard is probably insignificant. Diseases from animals, such as anthrax, glanders and lockjaw, do not appear to exist. In the presence of the black plague the rats and mice in mines would be a great menace. Injuries which miners receive are at least as free from secondary infections as in most classes of workers, if not more so.

Electricity. — In addition to burns and shocks, and occasionally electrocutions, the witnessing of brilliant electric flashes, occasions some *electrica ophthalmia* — a painful swelling of the eyes which may persist up to fourteen days.

Poisons. — These concern mine gases principally (*q. v.*). Sulphur occurs as pyrites and in acid forms, the latter dissolved in water and often strong enough to eat holes in clothing or to cause ulcers in the eyes if gaining access to them.

Assuaging of Thirst. — Questionable water supplies in many instances lay miners liable to typhoid fever, dysentery, and water borne diseases. Alcoholic beverages are not permitted while at work.

Personal Hygiene. Miners are in great need of instruction in matters of personal hygiene and the prevention of sickness. A large number of miners' illnesses could be curtailed by this means.

General Sanitary Conveniences

Wash Houses. — Unlike Illinois, few mines in Ohio are equipped with wash houses or change houses. This feature is emphasized by a state law in Illinois for all industries. Here and there in Ohio a few men group together and build and equip a shanty. Private persons sometimes do this and a charge of twenty-five cents to $1.00 per month is made for their use. However, at a few of the larger mines, wash houses built and maintained by the operating company are at hand. The workers supply soap, towels and locks. Shower baths are very scarce. Empty powder cans, tubs or basins are the rule. Water to bathe in is usually carried to the wash house by hand. Hot water is apt to be absent at electric mines. Drainage from wash houses is frequently dangerous to water supplies. By tradition, miners bathe completely every day where opportunity is offered. This means that in Ohio it is usually done at the home. Often the miner builds a shed in his yard in which to wash. Statistics show that properly equipped wash houses at mines are used by upwards of ninety percent of the employees. The absence of a place to wash up after work was commented upon by many physicians as a potent cause for rheumatism, colds and pneumonia in miners. (The Bureau of Mines has made a special study of wash and change houses in Technical Paper 116).

Clothing Provisions. — Quarters in which to exchange street clothing for work clothing are not provided at Ohio mines as a rule. Where wash houses are present, a place to hang clothing is usually at hand. In these, lockers are found about as often as ceiling hooks or hangers upon which clothes are hung and pulled up to the ceiling by means of a pulley and rope. Nails or pegs driven into the walls of a shanty are usually the only method. Too great crowding is a common observation. Screens against flies and other insects were rarely seen. (The ideal arrangement is a room partitioned off from wash quarters, equipped with ceiling hooks for work clothes and lockers for street clothes).

Water Supplies. — Water for drinking purposes is usually not obtained at the mine but is brought by employees in their lunch buckets. Wells in the neigh-

borhood of the mines, oftentimes in very poor sanitary condition, are the usual sources of water for drinking purposes. Scarcity of water is serious in some districts. Undoubtedly much typhoid fever, dysentery and other sickness in mine districts is due to lack of attention to the source of drinking water supplies. Hydrochloride disinfectants could be provided at small expense at every mine.

Sewage Disposal. — Mines do not have toilet facilities below ground. The men at work simply use the gob piles. In dry mines there is little hazard from this practice, provided care is taken by each miner to cover his stool. In many mines portable trench buckets, or closets mounted on trucks, could be used. At the surface, where from a few to fifty men are always employed, the vast majority of mines provide nothing in the way of a latrine, much less a sanitary one, for the workmen. Instead, the latter usually seek the neighboring dirt piles, fields, timber or hillsides. On account of this lack, the flies and insects about mines and mining towns are special menaces as disease carriers. A standard privy for the surface workers at a mine could be constructed at very little cost.

Lunch Provisions. — Each employee at a coal mine invariably carries his own lunch in a specially constructed miner's lunch bucket, which is provided with a water compartment. The thirty-minute lunch hour prevails. Occasionally workmen at the surface may have opportunity to lunch at home.

III. HOUSING CONDITIONS AND LOCAL HEALTH ADMINISTRATION

THE community has a large place in determining the diseases of miners. Very often the chief afflictions are favored by unsanitary housing conditions such as unsafe water supplies, sewage disposal, food supervision and lack of efficient local health administration. The attitude in America concerning community health is invariably to "put it up to" the community itself, and as long as communicable diseases are not spread to neighboring communities to an extent enough to raise protest, very little attention is given to health by any locality. Contrary to usual belief, the rural community is quite universally the most unhealthful place in which to live.

Housing Conditions.—The hygiene and sanitation of housing is important since it involves about one-third of the normal day for the worker and most of the time for his family. While some Ohio mines, as, for instance, those at Athens, Pomeroy, and about Bellaire and Nelsonville, are located in, or close to cities, as a rule mining towns are composed of a store or two around which very plain frame dwellings or shanty houses exist. While there were one or two model communities, as the one at Bradley, model in regard to building construction and arrangement and upkeep, safe sanitary standards as regards both water supplies and sewage disposal were nowhere encountered. The typical mine town consists of rows of dingy houses, all built after one or two patterns, often located on hillsides, with rows of privies located close to wells or draining toward the wells on the next street. Rarely any attempt at garbage collection exists. Often small ditches of water act as open sewers. Screens for houses are usually provided by the occupant if present at all.[1]

At practically all mines with company houses some workers

[1] *Houses for Mining Towns,* Jos. H. White, Bull. 87, U. S. Bur. of Mines (1914). This 64-page Bulletin, replete with illustrations and diagrams, covers the subject of sites and arrangement of towns, types of houses and their construction, the yard and its appurtenances, water supply, and sewage and refuse disposal.

have bought or are buying their homes. The company erects them for rent or sale and they are sold on very easy terms to the miners. Here and there additional houses, or a small town, have sprung up around the company houses. Building syndicates have erected many miners' residences and rent them, receiving this rent by a check off the miner's pay at the mine. Great complaint was frequently heard of the lack of upkeep of them, even to rendering them habitable. Miners' houses usually contain three to five rooms and are of the story-and-a-half type. Rentals average about $2.00 per room, A great number of mining companies have built from four to twelve houses and then allowed the balance of the community to build up of itself.

The township or village board of health or a health officer in lieu thereof is the usual SUPERVISION in the state in small towns and in outlying communities, such as coal mining districts.

IV. SICKNESS—TYPES AND EXTENT

THERE are two methods of inquiring into types and extent of sickness: First, statistics, and second, opinions of persons qualified, through experience or practice, to impart information.

Practically no statistics are available concerning sickness among Ohio coal miners. The bookkeeping of vital statistics has not extended this far. Some of the local unions and benevolent associations can supply certain limited statistics but these are too local to warrant drawing conclusions therefrom. Hospital statistics in mining districts are not representative, however complete they may be, since an unknown percentage of miners go to hospitals when sick. No insurance companies have to date taken out group policies covering sickness, among other disabilities, among miners.

We must rely chiefly on physicians in mining centers for the information desired. The experiences of physicians, scattered throughout the district, particularly where they agree quite unanimously, are probably more apt to be a close analysis of the sickness situation than any conclusions which might be drawn from statistics. The following is a summary of statements covered by the questionnaire by which physicians were interviewed personally in mining communities:

(a) DISEASES RARELY FOUND AMONG MINERS.—Certain diseases reputed to be prevalent among miners elsewhere or to be suspected, were found to be practically absent among Ohio miners. These are lockjaw, anthrax, glanders, hookworm, rat-bite disease and nystagmus.

(b) DISEASES FOUND LESS FREQNENTLY THAN USUAL: Pneumonia (except among negro miners where it seems to be more prevalent), tuberculosis (that which occurs is generally of a very slow progressive type, difficult to separate from miner's asthma) and venereal diseases. Mortality statistics (Illinois coal miners) on pneumonia and tuberculosis are not so favorable, however, as physicians' reports would indicate.

(c) DISEASES HAVING THE USUAL FREQUENCY: Acute rheumatic fever, afflictions of the upper respiratory tract (such as colds, tonsilitis, middle ear diseases, nose, throat and sinus affections), acute

bronchitis, eye afflictions (although the communicable disease, trachoma, or granulated eyelids, was frequent in some localities), skin affections, foot affections, deformities, nervous affections, hernias, varicose veins, other chronic diseases in general and malaria. Epidemic diseases such as influenza, smallpox, and summer diarrhea are usually worse than in the average rural village.

(d) Diseases With Occupational Earmarks are "rheumatism", asthmatic afflictions and afflictions due to alcoholic beverages. The "rheumatism" is of the type unassociated with fever, called musculo-articular, of which lumbago is the chief form and so-called "sciatica" the next. Exposure to cool damp atmospheres, drafts, the weather and straining efforts on the part of men not physically adapted for same are underlying causes. Asthma is a decreasing disease. Bad ventilation probably still plays the chief part in its cause, but the breathing of dust and men with weak hearts or other chronic diseases are becoming the principal reasons for what asthma is found. Asthma is rarely found in individuals under forty years of age. About one or two working men in a hundred are reported as asthmatics. The condition is a common reason for temporary absences. Alcoholism is exceedingly common, perhaps more so than in other industries since it seems to be traditional among a considerable number of miners to take a day or so off after each pay for an alcoholic debauch. Less serious are dust plugs in the ears (of no consequence but cause some temporary deafness), eyes flashed by electric short circuits, callosities on knees and sometimes elbows, hands and shoulders, mostly in "low coal" districts; "gassing" due principally to accidental breathing of white damp after blasting, fires or explosions, and premature ageing — this not a marked feature. There is some eye irritation due to sulphur (pyrites) dust.

General Summary of Diseases.—There is no reason for believing that the usual afflictions, outside of the respiratory system and the musculo-osseous system, are more frequent among miners than among other employees. In fact, they are, as a class, probably healthier than the average type of factory worker. Top workers, exposed to the weather, are said to have more sickness than those in the mine. Sickness is much more rampant among the women and children in mining districts than among the men. *Alcoholism* is far and away the chief bane. It was said to be on the decrease, — explained by one physician as due to education, increasing cost of alcoholic drinks, their present bad quality and the extension of prohibition. Of the respiratory afflictions, chronic bronchitis associated with asthmatic symptoms and often complicated by a chronic form of tuberculosis, is undoubtedly more prevalent than among agriculturists.

V. MORTALITY

MORTALITY statistics for Ohio coal miners have never been compiled. Neither the State Bureau of Vital Statistics nor the State miners' organization, nor other institution has published the death rates from various causes for Ohio miners. To be of value, these should be obtained for a period of several

years' time. However, something may be gained from the result of figures compiled for Illinois coal miners where the state miners' organization keeps a careful record of each coal miner's death in its death claim insurance department, by which a burial fund amounting to $250 is paid to the beneficiary on the occasion of the death of any miner. There is no reason to believe that death rates among Ohio coal miners are materially different or show better than those for Illinois.

I submit herewith a summary of tables and statistics compiled for Illinois miners during the past summer:

(1) The death rate for Illinois coal miners has been constantly on the increase since 1912, the year for which the first figures were obtained. In that year the death rate per annum per 100,000 employes was 1,003; the death rate for 1917 was 1,167, and for the first six months of 1918, 1,185.

(2) Violence, exclusive of suicide, constituted 36.8 percent of the causes of death, among 528 deaths among Ilinois coal miners, 1912-1918. This rate is 2.3 points less than for "miners and quarrymen" in the country at large (Registration Area, 1909). This cause, however, is greatly in excess of the general average of all deaths from violence, which is 10.6 percent for "occupied males" in the Registration Area, 1909. But one other occupation, "steam railway employes," surpasses miners in the high rate of death from violence. The marked excess in death from this cause nullifies, to a large extent, any comparisons possible for deaths from other causes, as for instance, tuberculosis.

(3) The *tendencies* in death rates for the chief causes of death, obtained by comparing the years 1916-1918 with the total period 1912-1918, were found to be as follows: Deaths are increasing from tuberculosis (106.5 *vs.* 99.4), cancer (45.4 *vs.* 41.4), cerebrospinal diseases (70.0 *vs.* 57.5), circulatory diseases (90.3 *vs.* 80.3), pneumonia (118.5 *vs.* 98.1), liver cirrhosis (22.1 *vs.* 17.6), genito-urinary (non-venereal) diseases (61.0 *vs.* 50.5) and violence (404.6 *vs.* 398.2). Deaths from the following show decreasing tendency: "Other" respiratory diseases (26.9 *vs.* 42.6) and suicide (29.3 *vs.* 31.9).

(4) Malaria and typhoid fever were limited practically to southern counties in the state where sanitary conditions in regard to water supplies and sewage disposal are notoriously bad. All the remaining causes of death were fairly evenly distributed in proportion to the number of employees in each district.

(5) The age groups in which certain causes of death are emphasized are as follows:

Tuberculosis shows its main emphasis in the age group 25 to 34, with a gradual decline thereafter throughout the balance of the age periods.

Pneumonia shows a gradual increase with age, up to the age period 45-54, then a gradual decline.

The figures for *other respiratory diseases* are too small for deductions, but in general show most emphasis later in life.

Cancer and *cerebrospinal diseases* both show a marked increase in the age period 35 to 44, then a more gradual increase to the age 64, after which there is a decline.

Circulatory diseases are emphasized from 46 years of age up.

For *liver cirrhosis* the figures are too limited for speculation, although the majority of deaths occur in the age periods between 35 and 64.

The *non-venereal genito-urinary* afflictions, principally *Bright's disease*, show a gradual increase by age period up to and including the age period 55-64.

The figures for *suicide* and *violence* were not obtained by age periods.

All other diseases have a very even distribution throughout the age periods, there being emphasis on the period 25-34 and less emphasis in the period 55-64.

(6) The death rate of Illinois coal miners when compared with those of the entire U. S. Registration Area (Mortality Statistics, page 19, 1916) is directly excessive, in spite of the number of deaths from violence, for the following afflictions: Typhoid fever, 30.8 *vs.* 13.3; cirrhosis of liver, 17.6 *vs.* 12.3; suicide, 31.9 *vs.* 14.2, and violence, 398.2 *vs.* 90.9.

By eliminating the distortion due to violence as a cause of death, and then comparing the purely medical causes (plus suicide), a clearer insight is obtained into the relative importance of certain prominent death causes. As compared with "miners and quarrymen" in general, Illinois coal miners rank (1) about the same with respect to tuberculosis and cerebrospinal diseases, (2) more favorable with respect to circulatory diseases and "other" respiratory diseases and (3) less favorable with respect to typhoid fever, cancer, pneumonia, liver cirrhosis, genito-urinary (non-venereal) diseases and suicide. As compared with "occupied males" in general, Illinois coal miners rank (1) about the same with respect to cancer and liver cirrhosis, (2) more favorable with respect to tuberculosis, cerebrospinal diseases, circulatory diseases, "other" respiratory disease, and genito-urinary (non-venereal) diseases, and (3) much less favorable with respect to typhoid fever, pneumonia, and suicide.

It is hardly more than speculation to attempt to state to what the increase in mortality among Illinois coal miners is due. Violence as a cause of death has not increased materially. Working conditions are undoubtedly getting better from year to year. Unquestionably, it cannot be charged to any single factor, such as alcoholism, which has been on the decrease throughout the period covered in the figures, nor fatigue, since work hours have decreased while the assistance of blasting powder and machinery have increased, nor, with the exception of certain diseases like typhoid and malaria, has geographical distribution in the state anything to do with it.

It is probable that more are reaching the later age periods when deaths are more frequent, since the industry is not, in its present dimension, more than a generation old in Illinois (the same may be said for Ohio). It is probable also that a change in racial complexion and to a greater congestion of population and its attendant evils, without a corresponding increase in health supervision of housing and living conditions are potent and basic factors.

(*To be continued.*)

OHIO LEADS IN NURSES

Ohio has more public health nures in proportion to population than has any other state in the Mississippi Valley Tuberculosis Conference, recently published figures show. The State had 98 nurses per million inhabitants at the time of this survey. Illinois was second with 88 per million, and had the largest actual total — 531. Ohio had the second largest total — 490. Two hundred and forty communities in the states covered by the conference, with an aggregate population of 12,840,-525, had 1,499 nurses engaged in tuberculosis work.

Pneumonia as a Public Health Problem*

By Rufus Cole, M. D., Rockefeller Institute.

PNEUMONIA is really a public health problem, but it has not been so recognized until recently. It took the insight of Dr. Hermann M. Biggs to see that pneumonia might be prevented, and that the high mortality from this disease might possibly be reduced. Pneumonia causes more deaths in this country than any other of the communicable disease. It is responsible each year for over 100,000 deaths in the United States, and for over 10,000 deaths annually in New York City alone. It is therefore obvious that it is a disease which we should study carefully, and that we should try to reduce its effect on the mortality rate if this is possible. As long as pneumonia was considered a disease arising, so to speak, from within, as long as it was considered that individuals suffering from it carried the causative organisms in their mouths before they became sick, it seemed that little could be done to prevent its spread.

Pasteur said that any bacterial disease is theoretically preventable when we know the means by which the organisms causing it gain entrance to the body. With pneumonia, it was supposed that we were dealing with disease in which the organisms were already present in the body—a disease which originated, not because the person acquiring it received something from without, but because something in the body was changed, and microorganisms previously present but harmless were able to cause this serious infection. However, studies have shown that the organisms causing the disease are not all identical in cultural characters, but that they differ among themselves, not in morphology but in their finer biological characteristcs. This, of of course, becomes of extreme importance when we begin to discuss the question of prevention, to try to limit the transmission of the disease, and above all to attempt to employ specific methods of cure. It has been shown that in two-thirds of the cases of pneumonia the organisms causing the disease are acquired from without; that these organisms are not present ordinarily in the mouths of healthy persons; that they are found only in the mouths of those sick with the disease or in their immediate environment, especially in dust, or in the mouths of persons closely associated with the sick. These healthy persons or carriers, who carry these organisms are very limited in number, however. They are relatively no more numerous than the healthy persons who carry diphtheria bacilli, or who carry the organisms causing meningitis. Therefore, if it is possible to limit the spread of the organisms from those sick of the disease and to destroy the organisms in the immediate environment of the patient, much will have been accomplished in limiting the occurrence of pneumonia.

A great deal has been done in preventing the spread of diseases due to organisms which inhabit the intestinal tract, but little has been done in the prevention of diseases in which the organisms leave the

*From *Health News*, New York State Department of Health.

body through the mouth or respiratory tract. However, this has now become of great importance owing to the prevalence of pneumonia in the army during the past winter. It was expected that there would be much pneumonia among the soldiers. We thought we could estimate almost accurately the number of cases of pneumonia which would occur, but, as it happened, the very widespread occurrence of this disease could not have been foretold, because a new type developed, a type not due to the pneumococcus, which is the cause of the kind of pneumonia we speak of as "lobar," but a type due to the streptococcus, an entirely different organism. This kind of pneumonia is not a new disease in the proper sense of the term, but its occurrence in adults in epidemic form is new to most of us. The way in which it has spread has been most interesting. Of course, we do not know the details accurately, but taking all the knowledge we have on the subject into consideration, it seems that the epidemic occurred because certain organisms, which are occasionally present in the mouths of normal individuals and are then of slight virulence, became more and more virulent. This increase in virulence of the bacteria occurred because they grew on soil which was especially suited to their growth, and this favorable soil was furnished by the presence of measles infection. These organisms were spread widely among the soldiers, causing much pneumonia and many deaths, even in those not suffering from measles. This form of pneumonia has now even appeared among the civilian population, so that this disease is now not only to be reckoned with as an army disease, but it must also be seriously considered by those entrusted with the health of the civilian population, and great efforts must be made to prevent its spread. I lately heard of an epidemic of this disease in one household where out of eight members of the household, all had been infected and six had died. Incidents of this kind should not cause us undue alarm, but we should realize that this disease is present among civilians, at least in our large cities. This fact adds to the importance which we should give to the prevention of the spread of respiratory infections through coughing, sneezing, spitting, etc.

The place where the infectious organisms are most concentrated is in the respiratory tract of the patient. That is where we can attack them most successfully. It is important in the first place to prevent the infection spreading from the individual sick with the disease. This can be done, first, by isolation of the patient. This means that we must recognize that these respiratory diseases are communicable. Second, we can prevent the spread of the infection by cleanliness in the surroundings of the patient. It has long been known that the organisms causing pneumonia may exist for a considerable time in dust. They are spread from the patient sick of pneumonia to the dust around him, and this dust is most infectious. By preventing the spread of this dust undoubtedly much can be done. The question of dust infection has not been given sufficient attention by those engaged in public health work. For years Dr. Prudden has been impressing upon us the dangers of dust infection, but we have been so interested in better water supplies, better sewerage systems, etc., that we have forgotten the importance of dust in spreading infection, especially in spreading the acute respiratory diseases, which

now cause more deaths than all the other acute communicable diseases combined.

It is possible that by the use of gauze masks much can be accomplished in preventing the transmission of infection from the mouths of persons sick with the disease. Last week, in visiting a camp in Illinois, it was interesting to see that every patient suffering from acute infection of the respiratory tract wore a mask constantly when he was not confined to his bed. The patient's bed was surrounded by sheets hung from wires to prevent droplets of saliva containing the infectious agent from being carried to the patients in adjoining beds. Just how effective masks are in preventing the spread of infection is not yet certain. Their use, however, does emphasize to all the personnel in the hospital, to the nurses and, in the household, to the members of the family surrounding the pneumonia patient, that they are dealing with a communicable disease, and that this disease is spread by coughing, spitting, etc.

A very important measure to be taken by public health authorities consists in making the disease reportable, because in the history of the prevention of all infectious diseases this has been found to be the most important initial measure. After this, isolation and the institution of measures for preventing the spread of infection from the patient, such as those just mentioned, must be insisted upon.

There is a still further method, a more simple one, which it is conceivable might be effective. It is the method of vaccination which has been so useful in preventing the spread of typhoid fever among the soldiers. Colonel Russell, who has been largely responsible for its introduction in the American army, has said that, judging from the Spanish-American War, if we had not employed this method of prevention we should already have had upward of 200,000 cases of typhoid fever with a corresponding number of deaths. The use of this method in preventing pneumonia is still in an experimental stage. As has been said, as far as two-thirds of the cases of pneumonia are concerned the organisms causing the diseases are specific, they are acquired by the patient by transmission from without; therefore, if a method of inducing immunity to this type of infection by means of vaccination could be developed it is certain that a large number of the cases of the disease due to pneumococci might be prevented. This method has been tried to some extent in South Africa, where pneumonia has existed to a very wide extent among the workers in the mines, and where it has caused great economic loss.

During the past winter (1917-18) 12,000 of our soldiers at Camp Upton were inoculated with antipneumococcus vaccine. Before these soldiers left for France, which was several months following the inoculation, not a case of pneumonia due to the types of organism used for inoculation developed, while amongst the men not so inocluated there occurred a considerable number of cases. The method therefore seems most promising. It will probably be extensively tested during the coming winter, and we hope its use will result in very materially reducing the number of cases of pneumonia in the army. This method, however, is hardly applicable to civil life except in cases where large numbers of men are grouped together and where the danger of infection exists to a very marked and dangerous degree.

The method of treatment of cases of pneumonia by means of immune serum is at present applicable in only one type of the disease. This type of infection, however, is responsible for at least one-third of the cases ending fatally; it is responsible for more deaths than occur from meningitis, typhoid fever, diphtheria and scarlet fever combined. It is therefore of great importance that this serum should be employed in suitable cases and that efforts should be made to administer it in the best possible way. The technique of determining which are the suitable cases and the technique of administration are not easy. Because of these difficulties, which stand in the way of the general practitioner carrying out this form of treatment successfully, efforts have been made in this and certain other states to develop an organization within the health department which may be of assistance to the physicians in the diagnosis and serum treatment of this disease. New York is the first state in which this has been put into successful operation.

If Lord Lister could have foreseen the difficulties in operation of the methods which were necessary for the prevention of the infectious surgical diseases, such as hospital gangrene, erysipelas, wound infection, etc., which formerly caused such a large number of deaths among the surgical cases in hospitals, it is probable that he would never have had the temerity to continue his efforts to attempt to bring about the elimination of these diseases. It has required the building of great new operating rooms and sterilizing plants, and the development of specially trained groups of physicians and of nurses and assistants. But the results have been well worth the effort.

To stop or even diminish the mortality from pneumonia is worth almost any degree of effort, however great. Dr. Biggs and all who comprise the department of health of this state have shown great courage in attempting to lessen the mortality from this disease. It is not an impossible task. More and more is constantly being learned concerning the nature of the disease, and with increasing knowledge the application of methods of prevention as well as those of treatment will become more simple and less difficult. Possibly not all of the one or two points of reduction in the annual mortality rate for which Dr. Biggs hopes, can be realized by lessening the mortality from pneumonia, but we hope that a considerable proportion of this reduction may result from the antipneumonia campaign.

NURSING ACTIVITIES IN JANUARY AND FEBRUARY

Ninety-seven Ohio public health nurses, reports of whose January activities have been filed with the State Department of Health, made 18,845 home visits and cared for 11,753 patients in that month. Toledo nurses, fifteen in number, led those of other cities, with 6,871 home visits and 5,029 patients under care. Tuberculosis cases, numbering 5,227, were more numerous than cases of any other kind.

In February one hundred nurses whose reports have been received by the Department made 16,285 home visits and cared for 11,060 patients. Toledo again led, the twenty-one nurses in service there during the month having made 5,732 home visits and had 4,712 patients under care. Tuberculosis cases numbered 5,141—more than any other class of cases.

City Divisions of Child Hygiene: A Way to Safeguard Children's Lives*

Just what does a city division of child hygiene do? How have other towns secured them? Are there figures to show that by the work which such divisions can do, the infant mortality can actually be reduced? Do they work for older children, too? Many questions like these have come to the Children's Bureau of the U. S. Department of Labor of late. They reflect the determination of the local child welfare committees of the Council of National Defense to make permanent the work for children which they have conducted in thousands of communities as part of the Children's Year campaign to "get a square deal for children."

Varieties of Work Undertaken

In order to answer these inquiries with the latest available information, letters have recently been sent by the Children's Bureau to the various cities which are known to have special divisions or bureaus in their municipal governments charged with work for the health and general welfare of children. The replies which have been received show great variations in the type of work undertaken by the hygiene divisions of different cities. They indicate that the actual needs of the localities have been the determining factor in planning the work rather than any categorical rules as to what a child hygiene division should be. Whatever phase of a child hygiene division's work may be given particular attention in any one city, the purpose remains the same—to unify efforts for child welfare under municipal responsibility, to do the work on a permanent basis, and to make universally available and desired the best knowledge of and facilities for the care of children and mothers.

Perhaps the most constant feature of the work of child hygiene divisions is the maintenance of clinics for sick babies and older children, and the employment of nurses who often work from these clinics as centers. Child consultation centers, or clinics for well children, as they are sometimes called, are frequently maintained as part of the child hygiene division's work. In a number of cities milk stations are maintained, at which milk of guaranteed purity can be obtained either free or at cost. In several cities prenatal instruction is given expectant mothers, in some instances through prenatal clinics. Nurses also are employed who go to the homes of expectant mothers who desire instruction in prenatal care. Sometimes nurses from the child hygiene division are assigned to "cover" certain districts, and give such instruction as the families within the district desire. Nurses are very generally employed in connection with city child hygiene divisions. The nurse is the link between the clinic and the home. She teaches the mother how to make the formulas prescribed by the doctors, and gives her any other instruction and advice she needs.

* Prepared for the *American City* by the Children's Bureau, U. S. Department of Labor; reprinted from that magazine, January, 1919.

The nurse is perhaps the most human factor in the educational work of the child hygiene bureau. But many other means of instruction are employed. Some cities have excellent exhibits; others distribute literature on child care. Through Little Mothers' Leagues in the schools young high school girls are instructed in the essentials of child care.

Some cities report that work in mental hygiene is being done in their child hygiene divisions; a few others are doing dental work. Work for the prevention of infant blindness is more general than either of these, and in some instances special nurses are kept in readiness to meet calls from the homes of new-born children.

The problem of under-nourishment has received much attention of late, and the child hygiene divisions, through maintaining stations where mothers can obtain expert advice on the feeding of the children, have contributed largely to its solution. The results of such work are reflected in the Census Bureau figures for 1916, which show a reduction in the number of deaths from digestive disorders. Very recently, in a number of places, the revelations of the weighing and measuring test of Children's Year have led to special action by the local committees for giving better instruction in methods of feeding. One town reported that one hundred children who were shown by the test to be under weight were taken to a diet specialist, who prescribed scientific diets for them, and, through a weekly clinic, watched to see that the effect of the diets was what was desired.

As the work of the child hygiene divisions varies, so there is no prescribed method of procedure in securing such a division. Frequently they come because the work of some volunteer health center has been so well done that the city feels it should be made a permanent part of its work. Sometimes the pressure of public opinion aroused by a campaign like Baby Week or Children's Year brings about the creation of a child hygiene division through a ruling of the board of health. Sometimes there is no special legislation other than the passing of an appropriation by the city council; in other instances there has been a special ordinance.

Results

The incompleteness of birth statistics in certain parts of the United States makes it difficult in many cities to prove whether or not there has been actual reduction in the loss of child life because of the work of these divisions. One feature of the work of the divisions in a number of places is publicity as to the value of complete birth registration. Some cities have, however been able to furnish figures which offer convincing proof of the effectiveness of the work which they are doing. In New York City, for example, where a child hygiene bureau was organized in 1908, the infant mortality has fallen from 144 per thousand births in 1907 to 88.8 in 1917. The rate achieved in 1917 is about 12 points lower than the latest figure for the birth registration area of the United States, which was 101 in 1916. Buffalo, N. Y., reports that in 1910, the year the bureau of child hygiene was organized, 2,323 children under five died in the city and that the total deaths numbered 6,940. In 1917, the total number of deaths had increased to

7,559, but the deaths of children under five had been reduced to 1,822.

It is because child hygiene divisions can achieve such results as these for the conservation of child life that the Children's Bureau urges their establishment as an important part of the follow-up work of the Children's Year campaign.

BIG HEALTH FORCE AT WORK IN AKRON

Akron's thorough organization for industrial and community nursing and medical care is illustrated by the following table:

	Agency.	*Physicians.*	*Dentists.*	*Nurses.*	*Clerks.*
1.	Firestone plant	5	5	12	12
2.	Goodyear plant	9	..	14	2
3.	Miller plant	1	..	3	..
4.	City Health Department	3	..	21	2
	City Health Dept. (Red Cross)	..	..	5	..
5.	Goodrich plant	10	2	22	10
	Total	28	7	77	26

Of this staff of 138 workers, 107 are engaged in industrial work — 25 physicians, seven dentists, 51 nurses and 24 clerks.

DEPARTMENTAL REPORTS BY DIVISIONS

DIVISION OF COMMUNICABLE DISEASES

Reported Cases of Notifiable Diseases, Ohio, February, 1919

Prevalence. — In order of greatest reported prevalence during the month of February, the notifiable diseases list as follows, with comparative figures for January given:

	Diseases.	Reported Cases. February.	January.
1.	Influenza	22,902	25,189
2.	Measles	692	583
3.	Scarlet fever	547	453
4.	Pneumonia, acute lobar	464	573
5.	Chickenpox	453	439
6.	Tuberculosis, all forms	411	425
7.	Pneumonia, broncho	406	679
8.	Diphtheria	380	428
9.	Mumps	357	191
10.	Smallpox	346	438
11.	Ophthalmia neonatorum	119	122
12.	Whooping cough	116	121
13.	Trachoma	105	17

For no other one notifiable disease of which records are kept by the Division of Communicable Diseases was a total of 100 or more cases

reported for the month of February. Out of a total of 27,748 cases of notifiable diseases recorded to date of March 11, 16,025 were reported by the cities of the State, 58 per cent of the entire amount as compared with 49 per cent of the State total for February, 1918, and 50 per cent for February, 1917, reported by the same health districts.

Influenza. — The total of reported influenza cases for the month of February indicates a rising prevalence of epidemic influenza, showing an increase of 20 percent as compared with the January reported total to date of February 11 and a case rate of 4.306 per 1,000 population as compared with 3.599, the corresponding case rate for January. The cities of the State reported 58 per cent of the entire number of recorded cases for February. The prevalence of influenza is widely distributed over the State. Cincinnati reported 10,000 cases during the month but, with the exceptions of Cleveland, Youngstown, Hamilton and Circleville, no other health district reported a total of 300 cases or more. There are strong indications of a rising wave of the influenza epidemic over the entire United States.

Measles. — This disease, which is second in the list for February, stood third in January, indicating the usual increased prevalence of measles during spring months, although a greatly diminished one as compared with February records for this disease in previous years. The reported prevalence of measles, during February the past five years, is as follows: February, 1914, 2,443 cases; February, 1915, 1,192 cases; February, 1916, 6,954 cases; February, 1917, 4,437 cases; February, 1918, 1,754 cases — giving a five-year February average of 3,356 reported cases of measles.

Scarlet Fever. — Scarlet fever, third in reported prevalence in February, was eighth in January. It is reasonable to expect a rising morbidity from this disease, opportunity for contagion being greater since the re-opening of schools following influenza closing orders. Scarlet fever prevalence for February was widely distributed over the State. Out of 63 counties reporting scarlet fever cases during this month, only three show a total of 30 cases or more, as follows: Lucas County 61 cases, Hamilton County 38, Portage County 33. The remaining cases were widely distributed. A total of 547 reported cases of scarlet fever for this month indicates a diminished prevalence of 53 percent as compared with a reported total of 1,167 cases in February, 1918.

Smallpox. — Smallpox prevalence shows a slow but steady increase the past three months. To date of the 11th of the succeeding month, there were recorded during December 245 cases, during January 301 cases, during February 346 cases. The reported prevalence of smallpox for February is largely confined to the northeastern, central and southwestern health districts. The counties whose reported smallpox prevalence during this month was 10 cases or more are as follows: Butler 101, Montgomery 37, Tuscarawas 33, Cuyahoga 22, Hamilton 20, Mahoning and Miami 17 each and Coshocton and Warren 10 each. The remaining 79 reported cases are distributed over 24 counties.

Trachoma. — The list shows 105 cases of trachoma recorded during February. Undoubtedly trachoma is much more prevalent than

our monthly reports would indicate. Portsmouth reported 90 cases of this disease during the month of February alone.

Meningitis, Cerebrospinal. — The eight cases of meningitis were recorded for the following districts: Cincinnati 2, Cleveland 1, Athens County, Coolville village 1; Gallia County, Perry Township, 1; Miami County, Piqua 1 and Bradford village 1.

Poliomyelitis. — Seven cases of this disease were reported, as follows: Columbus 2, Cincinnati 1, Dayton 1, Carrollton and Kent 1 each.

TABLE I. REPORTED CASES OF NOTIFIABLE DISEASES, OHIO, FEBRUARY, 1917-1919, WITH DISTRIBUTION FOR CITIES AND FOR VILLAGES AND TOWNSHIPS, FEBRUARY, 1919, AND CASE RATES PER 1,000 POPULATION, FEBRUARY, 1917-1919.

Disease.	February, 1919.			February, 1918.	February, 1917.	February Case Rates Per 1,000 Population.		
	Cities.	Villages and Townships.	Total.			1919.	1918.	1917.
All Notifiable Diseases.	16,025	11,723	27,748	10,709	10,543	5.217	2.035	2.024
Chickenpox	254	199	453	724	1,156	.085	.138	.222
Diphtheria	287	93	380	619	492	.071	.118	.094
Gonorrhea	189	18	207	62	229	.039	.012	.044
Influenza*	13,172	9,730	22,902	.....	.....	4.306	.....	.....
Measles	438	254	692	1,754	4,437	.130	.333	.852
Measles, German	5	20	25	1,567	134	.005	.298	.026
Meningitis, cerebrospinal	5	3	8	51	39	.002	.010	.007
Mumps	82	275	357	851	370	.067	.162	.071
Ophthalmia neonatorum	116	3	119	150	147	.022	.029	.028
Pneumonia, acute lobar	313	151	464	343	807	.087	.065	.155
Pneumonia, broncho*	49	357	406	.....	.....	.076	.....	.....
Poliomyelitis	4	3	7	6	10	.002	.001	.002
Scarlet fever	251	296	547	1,167	1,085	.103	.222	.208
Smallpox	196	150	346	1,642	216	.065	.312	.041
Syphilis	77	6	83	40	75	.016	.008	.014
Trachoma	99	6	105	21	25	.020	.004	.005
Tuberculosis, all forms	365	46	411	643	609	.078	.122	.116
Typhoid fever	44	34	78	130	157	.015	.025	.030
Whooping cough	71	45	116	899	533	.022	.171	.102
Other notifiable diseases	8	34	42	40	22	.008	.008	.004

* Not reportable until October 11, 1918.

TABLE II. REPORTED CASES, TEN NOTIFIABLE DISEASES, WITH CASE RATES PER 1,000 POPULATION, OHIO CITIES, FEBRUARY, 1919.

City.	Total Case Rates per 1,000 Population.	Total Reported Cases.	Diphtheria	Measles.	Meningitis, Cerebrospinal.	Pneumonia, Acute Lobar.	Poliomyelitis.	Scarlet Fever.	Smallpox.	Tuberculosis, All Forms.	Typhoid Fever.	Whooping Cough.
Akron	1.947	177	9	85	1	16	....	20	2	17	4	23
Alliance	.432	9	1	.....	....	.....	....	1	7	.....	.....	....
Ashland	.214	2	1	.....	....	.....	....	.....	.....	1	.....	....
Ashtabula	.086	2	1	.....	....	.....	....	.....	.....	1	.....	....
Athens	.260	2	.....	.....	....	.....	....	.....	.....	1	1	....
Barberton	.142	2	2	.....	....	.....	....	.....	.....	.....	.....	....
Bellaire	.378	6	2	.....	....	.....	....	3	.....	.....	1	....
Bellefontaine	.515	5	.....	1	....	3	....	.....	.....	1	.....	....
Bucyrus	.520	5	.....	1	....	1	....	.....	2	.....	1	....
Cambridge	.280	4	.....	.....	....	1	....	1	.....	1	1	....
Canton	.434	31	1	18	....	.....	....	3	.....	9	.....	....
Chillicothe	.806	13	10	.....	....	.....	....	3	.....	.....	.....	....
Cincinnati	.386	193	29	22	2	.....	1	28	14	84	3	10
Circleville	.148	1	.....	1	....	.....	....	.....	.....	.....	.....	....
Cleveland	.505	505	108	1	1	213	....	24	22	125	5	6
Columbus	.220	55	4	4	....	.....	2	13	3	28	1	....
Conneaut	.424	4	2	.....	....	1	....	.....	.....	.....	1	....
Coshocton	.400	5	.....	.....	....	.....	....	.....	5	.....	.....	....
Dayton	.204	34	5	1	....	5	1	.....	4	12	1	5
Delphos	3.258	18	.....	16	....	1	....	.....	.....	1	.....	....
Dover	.260	2	1	.....	....	.....	....	.....	.....	1	.....	....
Elyria	.245	5	1	1	....	.....	....	.....	3	.....	.....	....
Findlay	1.541	23	.....	21	....	2	....	.....	.....	.....	.....	....
Fostoria	.267	3	1	.....	....	.....	....	2	.....	.....	.....	....
Fremont	.297	3	1	.....	....	.....	....	.....	.....	1	1	....
Gallipolis	.176	1	.....	.....	....	.....	....	.....	.....	1	.....	....
Greenville	.288	2	.....	.....	....	.....	....	.....	1	1	.....	....
Hamilton	2.002	91	1	.....	....	21	....	2	62	5	.....	....
Ironton	1.050	15	4	.....	....	2	....	.....	.....	1	8	....
Jackson	.322	2	2	.....	....	.....	....	.....	.....	.....	.....	....
Lakewood	.960	16	3	.....	....	5	....	1	.....	7	.....	....
Lancaster	.236	4	.....	.....	....	.....	....	3	.....	.....	1	....
Lima	.690	23	2	1	....	.....	....	18	.....	.....	2	....
Lorain	1.176	49	3	35	....	.....	....	4	2	4	....	1
Mansfield	.252	6	1	.....	....	1	....	.....	.....	4	.....	....
Marion	.287	7	1	.....	....	5	....	1	.....	.....	.....	....
Martins Ferry	1.632	17	16	.....	....	.....	....	1	.....	.....	.....	....
Middletown	2.880	48	.....	30	....	1	....	.....	13	3	1	....
Mt. Vernon	.176	2	.....	.....	....	.....	....	.....	1	1	.....	....
Nelsonville	.450	3	1	.....	....	.....	....	.....	.....	2	.....	....
N. Philadelphia	.837	9	.....	.....	....	1	....	1	.....	3	4	....
Newark	.744	24	11	4	....	.....	....	7	.....	1	1	....
Norwalk	1.160	10	1	1	....	3	....	5	.....	.....	.....	....
Norwood	.240	6	.....	1	....	3	....	.....	.....	1	1	....
Painesville	.672	4	.....	.....	....	.....	....	4	.....	.....	.....	....
Piqua	.552	8	1	.....	1	4	....	1	.....	1	.....	....
Portsmouth	.315	9	2	.....	....	.....	....	3	4	.....	.....	....
Ravenna	.612	4	.....	.....	....	.....	....	4	.....	.....	.....	....
St. Bernard	.924	6	1	1	....	.....	....	4	.....	.....	.....	....

TABLE II. REPORTED CASES, TEN NOTIFIABLE DISEASES, WITH CASE RATES PER 1,000 POPULATION, OHIO CITIES, FEBRUARY, 1919 — Concluded.

City.	Total Case Rates per 1,000 Population.	Total Reported Cases.	Diphtheria	Measles.	Meningitis, Cerebrospinal.	Pneumonia, Acute Lobar.	Poliomyelitis.	Scarlet Fever.	Smallpox.	Tuberculosis, All Forms.	Typhoid Fever.	Whooping Cough.
Salem	.392	4	1					2		1		
Sandusky	1.127	23	2			17		1		3		
Sidney	.268	2								1	1	
Springfield	1.656	92		78				2		11		1
Steubenville	.363	11	3					1	5	1		1
Tiffin	.702	9	2			1		2	2	1	1	
Toledo	.765	153	31	8		1		58	4	24	4	23
Troy	3.140	20	1			2			15	2		
Urbana	.232	2				1				1		
Van Wert	.384	3	3									
Warren	1.110	15	2	1				8	3			1
Wash'gt'n C. H.	.230	2						1	1			
Xenia	.345	3				1				2		
Youngstown	1.107	123	13	78		1		15	16			
Zanesville	1.116	36		27				4	5			
Total	.651	1,973	287	437	5	313	4	251	196	365	44	71

*The omission of certain cities from this table is due to the following reasons: Kenton and Niles failed to submit the regular summary report by date of going to press. Bellevue, Bowling Green, Defiance, Delaware, East Cleveland, East Liverpool, Galion, Marietta, Massillon, St. Mary's, Wapakoneta, Wellston, Wellsville, and Wooster reported no cases of the disease listed.

DIVISION OF INDUSTRIAL HYGIENE

Summary of Activities in February, 1919

Consulting services of the Division have included the following: Control of venereal diseases; laboratory work in private suits; cooperation with welfare work of the National Lamp Works; installing reporting system at Glidden Varnish Company (manufacture of insecticides); more complete reports on the occupation of tuberculous persons; special opportunities for training in industrial hygiene; U. S. Public Health Service concerning their outline for plant analysis; air-conditioning the home; control of occupational diseases in rubber manufacturing plants; recommendations of men qualified in industrial hygiene; abolition of night work in bakeries and confectioneries; oil furunculosis; bills before Ohio legislature, and strengthening the occupational disease reporting law.

Investigative work has included: (1) Psychrometric methods; (2) six plant investigations at Columbus (printing, foundry and forging, pottery, glass, steel castings, blast furnacing) and one at Akron (rubber

manufacturing); (3) literature findings on 101 case reports. The U. S. Public Health Service is making plant investigations in Ohio through its office in Cleveland.

Publicity features have included: A technical article on "Wood Dust" by Dr. Albaugh, (OHIO PUBLIC HEALTH JOURNAL. January, 1919); distribution of 258 educational pamphlets, also 809 report forms; monthly abstract notes for the *American Journal of Public Health*; intensive training for 3½ weeks of nine U. S. Public Health Service men detailed to our office; and the beginning of training of fifty-seven Ohio State University students in industrial hygiene and eleven university students in public health problems.

Occupational diseases reported to the Division during the month were: *Arsenic poisoning,* 10 cases (Cleveland); *chlorin poisoning,* 1 case (Napoleon) — these referred to the Industrial Commission. Incomplete reports have recorded 251 cases of *tuberculosis* in industrial workers, three cases of *dermatitis,* and six of *anilin poisoning* in rubber workers.

DIVISION OF PUBLIC HEALTH EDUCATION AND TUBERCULOSIS

Summary of Activities in February, 1919

The acting director inspected the villages of Kings Mills and South Lebanon, Warren County, in company with representatives of the Cleveland district, Working Conditions Service, U. S. Department of Labor, and recommended that the Department co-operate with the U. S. Public Health Service in a survey of Warren County.

The joint board of Mt. Logan Sanatorium, Chillicothe, has voted to appropriate $10,000 to expand the institution.

Changes in the local public health nursing service included the resignation of Miss Lucy Reilly as county nurse for Trumbull County and the return of Mrs. Margaret Gibbons to her position as public health nurse in Zanesville after several months with the Red Cross.

Notifications of tuberculosis hospital admissions and discharges received during the month are summarized in the following table:

Institutions	*Patients Reported*	*Admissions*	*Discharges*
Ohio State Sanatorium	56	24	40
Butler County Sanatorium	2	2	..
Franklin County Sanatorium	42	36	8
Lucas County Tuberculosis Hospital	36	24	20
Dayton District Hospital	9	6	4
Lima District Hospital	19	14	10
Springfield District Hospital	10	6	4
Springfield Lake Sanatorium	32	19	15
Mt. Logan Sanatorium	2	1	1
Rocky Glen Sanatorium	2	1	1
St. Anthony's Hospital	9	5	8
Total	219	138	111

Total notifications 249: Referred to local public health nurses 199, investigated by Division nurses 15, histories unobtainable 7, pending investigation at end of month 28.

Total pending February 1 from January, 57: Investigated by Division nurses 25, histories unobtainable 3, referred to local public health nurses 6, still pending investigation at end of month 23.

Total pending investigation March 1, 51.

Notifications of discharged tuberculous soldiers and action taken thereon, with totals since the beginning of this work, are summarized as follows:

	February	*Total*
Notifications received	3	889
Cases referred to public health nurses	1	600
Cases received from public health nurses	1	350
Cases written directly	2	283
Replies received	1	71
Cases visited by division nurses	9	368
Cases admitted to sanatoria	3	44
Cases not found	2	141
Cases not heard from	3	133

Prevention of blindness work during the month is summarized as follows:

Reported cases of inflammation of the eyes of the newborn 99, classified as follows: (by color) white 87, colored 9, unknown 3; (by source of report) reported by physicians 35, by midwives 14, by nurses 23, by physicians and nurses 4, by institutions 12, by laymen 1. Instructions were given to health officer by telephone in one case, five investigations were made and two cases were provided with hospital care. A Cleveland midwife was fined fifty dollars and costs in January following conviction on a charge of failure to report a case of inflammation of the eyes of the newborn, filed by the Cleveland board of health.

DIVISION OF LABORATORIES

Summary of Activities in February, 1919

The Division made 2,168 examinations during the month, of which 1,758 were bacteriological and 410 were chemical. The bacteriological examinations, with their results, were as follows:

Diphtheria, pos. 32, neg. 213, sus. 10, no growth 7	262
Tuberculosis, pos. 92, neg. 264, unsatis. 2	358
Typhoid, pos. 7, neg. 33	40
Wasserman, pos. 183, neg. 702, unsatis. 40	925
Gonorrhea, pos. 5, neg. 54	59
Rabies, pos. 1, neg. 3	4
Water	109
Miscellaneous	1

Outfits were distributed in the following quantities: tuberculosis 721, diphtheria 432, typhoid 111, malaria 24, Wasserman 1,762, gonorrhea 148, ophthalmia 1,938, chemical water 6, bacterial water 68; total 5,210.

Chemical samples examined included 99 samples of foods and 38 of drugs. Results of the food examinations were: satisfactory 48, misbranded 2, adulterated 26, insufficient information 23. The misbranded products were one egg substitute and one vinegar. Those found adul-

terated were: butter 1, canned vegetables 2, hamburger 1, lard 2, lemon extract 1, maple syrup 1, milk 15, vinegar 3. The drugs were reported as follows: satisfactory 27, misbranded 3, adulterated 4, insufficient information 4. Those misbranded were one miscellaneous and two proprietaries. Those adulterated were one acetyl salicylic acid, two camphorated oils and one tincture of iodine.

DIVISION OF SANITARY ENGINEERING

Summary of Activities in February, 1919

Forty-two visits were made by representatives of the Division in connection with proposed and existing water supplies and sewerage and sewage disposal systems. Thirteen conferences were held in Columbus.

Seven certifications of railroad water supplies were issued, among the public water supplies so certified being those of Dennison, Jackson, Logan, Xenia and New Philadelphia.

Fourteen plans, proposals and complaints were received. Fifty-two reports, notes and memoranda were submitted by members of the staff.

DIVISION OF PLUMBING

Summary of Activities in February, 1919

Representatives of the Division made thirty inspections and attended thirteen conferences in February. Ten investigations were made, one order and one recommendation were issued, one set of plans was approved and four certificates of approval were issued.

BUREAU OF PUBLICITY, DIVISION OF ADMINISTRATION

Summary of Activities in February, 1919.

Fifteen publicity stories were released during the month. Thirteen of these, issued through the weekly News Letter, appeared in 138 papers in 102 communities in 64 counties, attaining a total of 3,562,204 printed copies (incomplete), an average of 274,015 printed copies per story.

Publications received from the printer during the month were: Reprint 1810, "Experiments in Air-Conditioning the Home" (from November, 1918, Ohio Public Health Journal), and Administrative Bulletin 130, "Laboratory Service of the Ohio State Department of Health". Four publications were in the hands of the printer. Distribution of publications amounted to 12,129 copies. Material was furnished to a number of ministers for use in connection with Health Sunday.

Copy was prepared for the Ohio Public Health Journal, Vol. X, No. 2 (February, 1919).

Twelve volumes were added to the Department Library.

HEALTH OFFICERS' ROUNDTABLE

The Youngstown chamber of commerce and federation of women's clubs have endorsed the proposal that their city employ a full-time health officer. A campaign of education to arouse public sentiment in favor of this proposition has been begun.

Dr. H. L. Rockwood has succeeded to the position of health commissioner in Cleveland, following the resignation of Dr. R. H. Bishop, Jr., who is absent on Red Cross duty in Italy. Dr. Rockwood had been acting health commissioner since Dr. Bishop's departure.

Dr. H. G. Ebert has succeeded Dr. D. E. Robinson as United States Public Health Service medical officer in charge of the Camp Sherman Extra-Cantonment Zone. Dr. Robinson has been transferred to Public Health Service duties elsewhere. It is expected that health administration in Chillicothe and surrounding territory will be transferred to local officials within the next few months.

The Canton city council has before it a recommendation of the board of health that the position of city health officer be placed on a full-time basis, with an annual salary of $3,300. Plans for the establishment of a venereal disease clinic are also pending in Canton. Dr. C. A. LaMont, health officer, has tendered his resignation, to take effect when his successor is appointed. He has endorsed the whole-time health officer proposal.

To prepare for an intensive anti-tuberculosis campaign in Akron, Health Commissioner C. T. Nesbitt was authorized by the city board of health to go to Chicago to study preventive measures among children as practiced in the schools there.

A recent smallpox outbreak at Troy produced the usual one or two physicians who insisted that the disease was chickenpox. Health Officer C. A. Hartley put the matter up to the State Department of Health and was advised to quarantine reported cases of chickenpox in the same manner as those reported as smallpox, and to require all exposures to reported chickenpox cases to be vaccinated or submit to seventeen days' quarantine.

Akron has entered upon a vigorous fight against diphtheria. Physicians are being urged to take cultures of every sore throat and every suspicious nasal discharge met with in their practice and to submit these to one of the four culture stations established by the health department in various parts of the city. The county commissioners have made provision for supplying free immunizing treatment for all contacts with carriers or cases, and free antitoxin for all indigent cases.

PUBLIC HEALTH NOTES FROM OVER THE STATE

A house-to-house census to determine the number of influenza cases which have occurred in Cincinnati is one of the features of an anti-influenza program adopted by the public health council of that city. Efforts will also be made to determine the economic effect of the epidemic, to persuade all victims to take medical treatment and to find employment for persons who have lost their jobs because of influenza attacks.

* * *

A shopping trip taken while her residence was under quarantine for smallpox cost Mrs. Mary Carnes of Zanesville a fine of fifty dollars and costs.

* * *

Twenty centers for the instruction of physicians in the latest methods of diagnosing and treating venereal diseases are to be established in Ohio under plans in which the Ohio State Medical Association, the United States Public Health Service and the State Department of Health are co-operating.

* * *

A smallpox quarantine proved too irksome to suit John Mitchell of West Carrollton, so he left home despite the restriction and went to Dayton, where he obtained a job. His liberty was short-lived and cost him $50 — the amount of the fine imposed when he was brought back and again placed under quarantine.

* * *

Declaring that there was much feeling throughout the city against a general school vaccination order and that the smallpox situation was not alarming, the Elyria board of education refused to accede to the request of Health Officer George E. French that an order be issued requiring the vaccination of school children. This action was taken March 3. Reports to the State Department of Health show a total of three reported cases of smallpox in Elyria in February and eight in March.

* * *

Six clinics for children of preschool age have been reopened by the Cincinnati health department, following an interruption of this activity brought about by a shortage in the department's staff during the war.

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Mrs. M. B. Morrisey, wife of the secretary of the Bucyrus chamber of commerce, has been employed as public health nurse by the public health league of Bucyrus. She had war nursing experience in France, and was formerly public health nurse at Elyria.

VIEWS OF THE PRESS ON PUBLIC HEALTH

Cincinnati's Health Department Looks Ahead

Briefly but comprehensively the Department of Health presents in its March Bulletin, "Three Years in Retrospect." In this are shown decided advances accomplished in manner, means and method in

health conservation. Reduction of hazard in communicable diseases, with some emphasis on tuberculosis, is given exposition illuminated by numerous charts. Excellent results attained through many agencies of ministration are cited, notably in prevention of blindness, medical relief for the poor, child hygiene, study of retardation, health certification and various expressions of medico-social service. All interesting information and inspiring, confirming public confidence in the progressiveness and efficiency of the city's official health guardians.

But above and beyond that which we have is always that to which we aspire. The benefits of progress made are but incentive to progress yet attainable. Naturally, therefore, and encouragingly, we find the Health Department seeking other avenues of advance, even as those already open are surveyed with large measure of satisfaction. For example, The Bulletin is of opinion that

> The educational work of the Health Department should be greatly extended and strengthened, and we believe this can best be accomplished by creating a Bureau of Public Health Education. The chief of the bureau would be the consulting expert on the subject of educational publicity. Facts, statistics and other data prepared by the technical heads of the department would be turned over to the Bureau of Health Education for popular interpretation. The plan would include the use of motion picture films, educational exhibits and campaigns, lecture syllabi and lectures to clubs, other organizations and the general public; in a word, utilization of all legitimate means of popularizing preventive medicine, sanitary science and local health problems.

That seems a sane suggestion toward wholesome growth in knowledge that is vital to community wellbeing. Just how feasible such a departure may be is a detail that does not affect its desirability. The same may be said with equal relevancy of this companion desire of the Health Department, to-wit:

> Just as we are to have a Department of Industrial Hygiene and Preventive Medicine in the Medical College of the University so, too, must we have a Bureau of Industrial Hygiene and Occupational Disease in the Health Department. Industrial Hygiene is not only a boon to medical science, but it offers many possibilities for constructive public health activities which will lessen sickness and lower mortality among the working people. It is a new expression of preventive medicine, in which we wish to continue public health supervision over adult life much in the same fashion as we look after the physical welfare of youngsters in school.

As the Bulletin appositely points out, the larger industries maintain medical supervision of employees as an economic measure that pays. But the smaller factories can not sustain the overhead expenses. Here the Health Board would find a fertile field for research and for conservation in that the Industrial Hygiene Bureau would furnish an agency for the study of health hazards in the different trades. In another direction there would be furnished opportunity to keep a searching and scientific survey of the health and habits of food handlers which the department regards as of first importance; first, to protect the patrons of restaurants, hotels and bakeries; and second, to improve the health of a large group of workers subjected to dangers in their occupation.

All of which is significant in that it presents the guardians of Cincinnati health as having the forward view, the vision of progressiveness.—Cincinnati *Commercial Tribune.*

DISEASES NOTIFIABLE IN OHIO.

Peport cases or suspected cases of the following diseases to the health officer having jurisdiction.

NOTIFIABLE INFECTIOUS DISEASES OF COMMON OCCURRENCE.

Chancroid.
Chickenpox.
Diphtheria and Membranous Croup.
Gonorrhea.
Influenza.
Measles.
Measles, German.
Meningitis, Epidemic Cerebrospinal.
Mumps.
Ophthalmia Neonatorum.
Pneumonia, Lobar.
Pneumonia, Broncho.
Poliomyelitis, acute infectious, (Infantile Paralysis).
Scarlet Fever.
Smallpox.
Syphilis.
Trachoma.
Tuberculosis, all forms, the organ or part affected to be specified.
Typhoid Fever.
Whooping Cough.

OTHER NOTIFIABLE INFECTIOUS DISEASES.

Actinomycosis.
Anthrax, human.
Cholera, Asiatic, (cholera nostras when Asiatic cholera is present or threatened).
Continued fever lasting seven days.
Dengue.
Dysentery:
a. Amebic.
b. Bacillary.
Favus.
Glanders, human.
Hookworm Disease.
Leprosy.
Malaria
Paragonimiasis.
Paratyphoid Fever.
Plague.
Rabies, human.
Rocky Mountain spotted, or tick fever.
Septic sore throat.
Tetanus.
Trichinosis.
Typhus Fever.
Yellow Fever.

OCCUPATIONAL DISEASES AND DISABILITIES.

Anilin Poisoning.
Arsenic Poisoning.
Benzine (Gasoline) Poisoning.
Benzol Poisoning.
Bisulphide of Carbon Poisoning.
Brass Poisoning.
Carbon Monoxide Poisoning.
Compressed-air Illness.
Dinitrobenzine Poisoning.
Lead Poisoning.
Mercury Poisoning.
Naphtha Poisoning.
Natural Gas Poisoning.
Phosphorus Poisoning.
Turpentine Poisoning.
Wood Alcohol Poisoning.

Any other disease or disability contracted as a result of the nature of the person's employment.

DISEASES OF UNKNOWN ORIGIN

Cancer.
Pellagra.

LIFE, LIBERTY AND THE PURSUIT OF HAPPINESS

are inalienable rights of every American.

Yet—

Ohio Communities are Permitting

LIFE TO BE SACRIFICED
to Preventable Disease

LIBERTY TO BE THROTTLED
by Unnecessary Sickness

HAPPINESS TO BE DESTROYED
by Needless Deaths of Loved Ones

Preventable Disease is Un-American

How Much Un-Americanism Exists
in Your Community?